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APPENDIX C - GROUND MOVEMENT AND DAMAGE IMPACT ASSESSMENT

GROUND MOVEMENT ANALYSIS REPORT

26 Netherhall Gardens
London NW3 5TL

Client: Atlas Property Company Ltd

Engineer: Sinclair Johnston and Partners

J15344

December 2015

GEA Geotechnical & Environmental Associates

Document Control

Project title	26 Netherhall Gardens, London, NW3 5TL	**Project ref**	J15344
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Issue No	**Status**	**Date**	**Approved for Issue**
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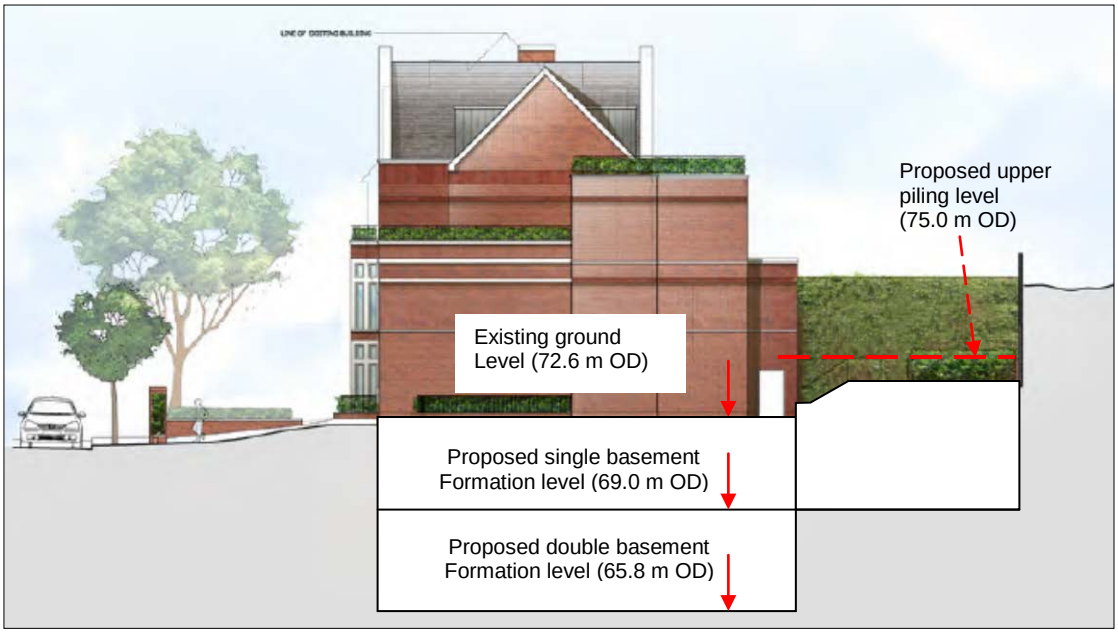
1.0 INTRODUCTION

Geotechnical and Environmental Associates (GEA) has been commissioned by Sinclair Johnston and Partners (SJ&P), on behalf of Atlas Property Company Limited, to complete a ground movement assessment for the proposed redevelopment of this site at 26 Netherhall Gardens, London, NW3 5TL, which is to include a part single-storey and part two-storey basement following demolition of the existing building.

A site investigation has been undertaken by Site Analytical Services Limited (SAS) referenced 14/22068 and dated June 2014. Other information sourced from the London Borough of Camden (LBC) planning portal includes Sinclair Johnston structural drawings and Design and Construction Statement along with existing and proposed drawings by Squire and Partners. A Basement Impact Assessment was also undertaken by SAS and is referenced 14/22068-2 dated June 2014.

1.1 Proposed Development

It is understood that it is proposed to demolish the existing building and replace it with a new structure which will include a single-storey basement under the southern half of the house and extending almost to the rear boundary and a two-storey basement beneath the northern half of the house only. A section through the proposed building indicating the extent of the proposed basements is shown below.



It is understood that the temporary and permanent excavation support will be provided by a perimeter secant bored pile wall with some internal support provided by contiguous walls. The structural loadings will ultimately be transferred to a raft slab and any net uplift forces will be resisted by the embedded portions of the bored pile wall.

This report is specific to the proposed development and the advice herein should be reviewed if the development proposals are amended.

SJP comments:
Basement size significantly reduced as outlined in report

1.2 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

2.0 THE SITE

2.1 Site Description

The site is located in the London Borough of Camden, northwest London, and in the ward of Frognal and Fitzjohns, approximately 300 m to the north of Finchley Road London Underground station. It fronts onto Netherhall Gardens to the west and is bordered by detached houses to the north and south and by the gardens of the houses on Maresfield Gardens to the east. The site may be additionally located by National Grid Reference 550453, 178498.

A full description of the site and its geographical and environmental settings are included in the site investigation report and within the Basement Impact Assessment (BIA); it is important to note that the site slopes up by some 5 m from front to rear (west to east).

3.0 GROUND MOVEMENT ANALYSIS

This analysis has been limited to the assessment of movements arising from the installation of the bored pile walls and the subsequent excavation.

3.1 Construction Methodology

It is proposed that the basement box secant bored pile walls will be used to temporarily support the excavation during construction with long term retention provided by composite action of the pile walls and their internal lining walls. Whilst a construction sequence has been outlined by Sinclair Johnston, further consideration of the piling levels and sequencing has been undertaken by GEA to allow the analysis of ground movements to be undertaken.

Initially piling will be undertaken from the upper rear garden level and this piling level has been assumed to be 75.0 m OD. Piles surrounding the deeper basement will then be installed from roughly the existing ground level of 72.6 m OD.

Following completion of the piling, the single-level basement will be excavated to 69.0 m OD with the bored pile walls supported temporarily by steel props and the new lower ground floor slab providing the permanent support. The deeper basement will be excavated ‘top-down’ so that the lower ground floor slab will provide restraint during the excavation down to the basement formation level of 65.8 m OD.

4.0 GROUND MOVEMENTS

An assessment of ground movements surrounding the excavation has been undertaken using the X-Disp computer program licensed from the OASYS suite of geotechnical modelling software from Arup. This program is commonly used within the ground engineering industry and is considered to be an appropriate tool for this analysis. The X-Disp program has been used to predict ground movements likely to arise from the installation of the bored piled walls and then from the subsequent excavation of the basement. For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are those taken from CIRIA report C580[1].

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction having been taken as being perpendicular to Netherhall Gardens whilst the y-direction is parallel to it. Vertical movement is in the z-direction.

The full outputs of all of the stages of the analyses can be provided on request but the output movement contour plots are included within the appendix along with the full results report for the final stages and the damage assessment.

4.1 Models Used

The construction sequence and details of the proposed foundations together with details of the adjacent buildings have all been provided by SJ&P.

4.1.1 Piling and Excavation Related Movements

The bored pile walls will be installed from the ground levels noted previously and will support the excavation in the temporary case with the permanent excavation support provided by the piled walls acting compositely with the walls and floors to form a rigid basement box. A formal pile design will be undertaken by the piling contractor in due course, along with the finalization of the excavation sequence and propping design. However, at this stage there is considered to be sufficient detail in the Sinclair Johnston documents to make certain assumptions upon which the ground movements can be based.

The wall is proposed to be a secant bored pile wall. The SJ&P drawings indicate that the piled wall will be propped at pile head level as well as at basement level in both temporary and permanent conditions and on this basis a piled wall of high stiffness in clay is considered an appropriate wall model for the analysis. Pile lengths of 11.1 m and 8.6 m have been adopted representing an embedded pile length of around 4.5 m which is considered reasonable for multi propped walls such as these.

The shape of the basement means that some simplification is required to model it within the X-Disp program. Accordingly the line of the southern piled wall has been simplified to a straight line. In addition the basement is at different levels and as such has been considered as two separate rectangles. The deeper northern basement has been analysed separately to the southern shallower basement and their influences considered separately since each basement 'shields' buildings on the opposite side from the effects of the other.

[1] Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design* CIRIA Report C580.

4.1.2 Basement Heave Considerations

At this site the loads imposed by the proposed building are to be supported upon a raft that bears within the London Clay. The excavation does, however cause unloading of the London Clay which in turn leads to heave and swelling due to elastic 'rebound' following stress relief in the short term and long term swelling due to the recovery of pore water pressures.

It is estimated that the total unloading will be between 70 kN/m^2 and 110 kN/m^2 but that the loading from the new structure will be of a similar order. Whilst there may be some short term heave, after construction the reloading will effectively balance the unloading such that ground movements should be negligible.

4.2 Results

4.2.1 Piling and Excavation Related Movements

The X-Disp analysis has been used to estimate the movements behind the walls resulting from pile installation and basement excavation. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the wall (horizontal movement). The contour graphs of these movement predictions are appended for the piling phase together with the total movement prediction which has combined the effects of piling and excavation.

The predicted movements are summarised in the table below; the results are presented to the degree of accuracy required to allow predicted variations in ground movements around the structure to be illustrated, but may not reflect the anticipated accuracy of the predictions.

Phase of Works	Maximum Movement at 71.6 m OD – sensibly average foundation level	
	Vertical Settlement (mm)	Horizontal Movement (mm)
Piling	5 to 10	5 to 10
Combined Piling and Basement Excavation	5 to 10	15 to 20

The movements set out in the table above are the maximum movements and generally occur immediately or just outside the line of the piled walls; the effects of the excavation reduce with distance away from the piled wall.

5.0 DAMAGE ASSESSMENT

In addition to the above assessment of the likely movements that will result from the proposed development, some of the neighbouring structures are considered to be sensitive structures and have been subject to Building Damage Assessments, on the basis of the classification given in Table 2.5 of CIRIA report C580[2], referred to hereafter as 'Burland' damage categories. For this assessment the adjacent properties at Nos 24 / 24A and 28 Netherhall Gardens and the single storey structures beyond the eastern site boundary have been adopted as sensitive structures for prediction of the building damage category.

5.1 Piling and Excavation Related Damage

The predicted movements have been further analysed in respect of the key sensitive structures in the front, side and rear walls of Nos 24 / 24A and 28 Netherhall Gardens and the single

[2] Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design* CIRIA Report C580.

storey buildings to the rear of the site.

The sensitive structures have been modelled as lines in the analysis and are the lines along which the damage assessment has been undertaken. These critical lines are assumed to be sensitive at their foundation levels which, from the drawings supplied by SJ&P, have been taken as 71.0 m OD for Nos 24 / 24A, 71.6 m OD for No 28 and 77.0 m OD for the single-storey structures to the rear of the property.

The movement predictions above have been assessed against the length and height of the structures from foundation to eaves and the calculated strains compared against the limits defined within the Burland categories of damage. On the basis of these results, the following damage categories have been predicted; calculation sheets and movement contour plots are attached.

Building Damage Assessment		
Sensitive Structure	**Elevation**	**Category of Damage***
24 / 24A Netherhall Gardens	Front (Line 1)	Category 2 (Slight)
24 / 24A Netherhall Gardens	Side (Line 2)	Category 0 (Negligible)
24 / 24A Netherhall Gardens	Rear Side (Line 3)	Category 0 (Negligible)
24 / 24A Netherhall Gardens	Rear (Line 4)	Category 2 (Slight)
28 Netherhall Gardens	Front North (Line 5)	Category 1 (Very Slight)
28 Netherhall Gardens	Front South (Line 6)	Category 2 (Slight)
28 Netherhall Gardens	Side (Line 7)	Category 0 (Negligible)
28 Netherhall Gardens	Rear (Line 8)	Category 2 (Slight)
Rear Structures	West (Line 9)	Category 0 (Negligible)
Rear Structures	North (Line 10)	Category 0 (Negligible)
Rear Structures	East North (Line11)	Category 0 (Negligible)
Rear Structures	East Mid (Line 12)	Category 1 (Very Slight)
Rear Structures	East South (Line 13)	Category 0 (Negligible)
Rear Structures	South (Line 14)	Category 2 (Slight)

**Refer to Table 2.5 of C580: Classification of visible damage to walls.*

The building damage reports for sensitive structures highlighted in the above table predict that the damage to the adjoining and nearby structures would vary from Category 0 (negligible) to Category 2 (slight). A site plan annotated with the above categories is appended for clarity.

5.2 Comment

The damage assessments above reflect the critical cases in the phases of construction and to a degree represent a simplification of the construction process and offer worst-case scenarios.

SJP comments:
Basement size significantly reduced, expected movement to decrease from values outline in report

The damage assessments are therefore considered to represent a reasonable estimate of movements at this stage and offer a simple 'global' view of the movement contours around the site. The ground movement analysis will be refined in due course when the pile design has been completed, propping levels and stiffnesses have been defined and the construction finalised. However it is the experience of GEA that the refinement through detailed design will reduce rather than increase predictions of wall movements and it follows that the final damage categories will be no worse than those above.

5.3 Monitoring of Ground Movements

The predictions of ground movement based on the ground movement analysis will be checked by monitoring of adjacent buildings.

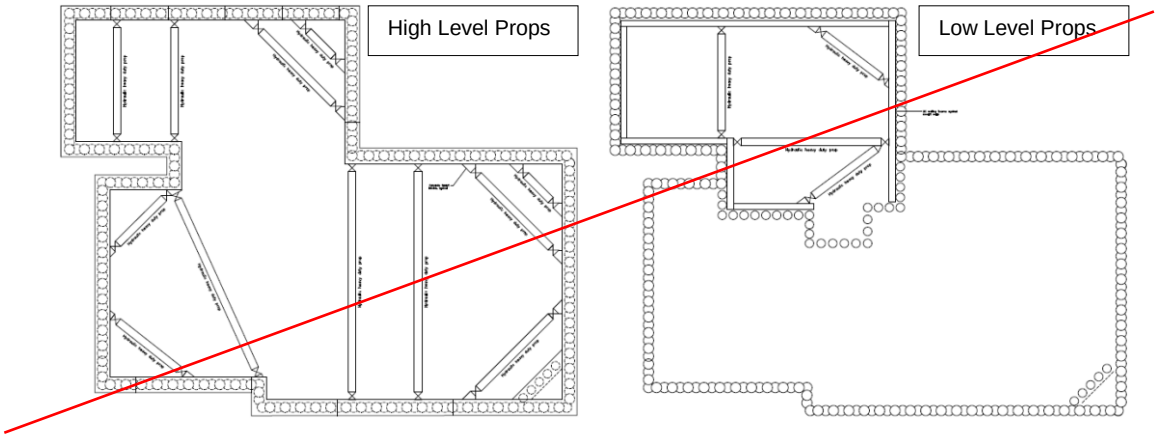
Condition surveys of the above existing structures will be carried out before and after the proposed works will be set out by Sinclair Johnston in a monitoring strategy. This will be subject to discussions and agreements with the owners of the adjacent properties and structures. Contingency measures will also be agreed and will be implemented if movements of the adjacent structures exceed predefined trigger levels.

6.0 CONCLUSIONS AND MITIGATION

The analysis has concluded that the predicted damage to the neighbouring properties would, very between Category 0'negligible' and Category 2 'slight'. On this basis, the damage that would inevitably occur as a result of such an excavation would generally fall within the acceptable limits, with mitigation measures required for those walls predicted to be Category 1 or higher as set out in Section 3.3 of CPG4 (2015).

The detailed retaining wall design will provide a site specific view of the likely ground movements and will allow refinement of the ground movement analysis. The detailed design will be used to ensure that the predictions of ground movements are within acceptable limits.

The SJ&P drawings, extracts from which are provided below for high level and low level temporary props, indicate that heavy duty hydraulic props will be used. Such props will enable the wall to be preloaded before the excavation of each level will take place. The loads applied to each prop will be matched to those predicted in the wall design so that upon excavation, the soil behind the wall effectively returns to its original stress condition. This should minimise movement behind the walls but will also provide the facility to adjust the prop loads throughout the groundworks in line with the data obtained from the movement monitoring. Further, the props have been located to coincide as far as possible with the location of the walls of the adjacent buildings that lie perpendicular to the proposed basement. These are the walls most sensitive to movement and therefore require the greatest degree of protection.



The piling and subsequent excavation will in practice be separated by a number of weeks during which time the piles will cure, capping beams will be cast and the upper propping installed. This will provide an opportunity for the ground movements to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the wall movement predictions to be reassessed prior to the main excavation taking place so that propping arrangements can be adjusted if required.

This pre-emptive approach to mitigation is considered to provide a robust methodology to minimising predicted ground movements in advance of construction and then monitoring and responding to movements during construction.

APPENDICES

SOIL DISPLACEMENT MODEL RESULTS

X-DISP ANALYSIS

Movements following underpinning

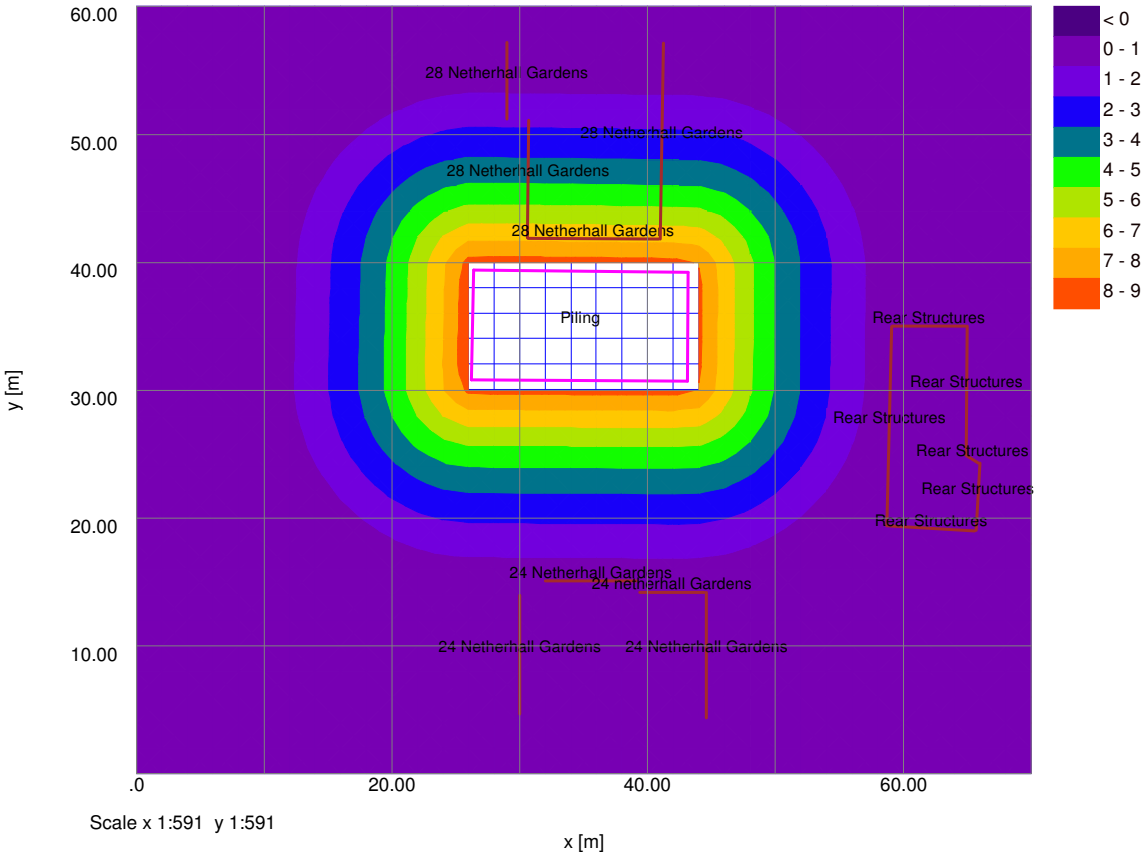
Movements following underpinning and piling

Movements following underpinning, piling and excavation

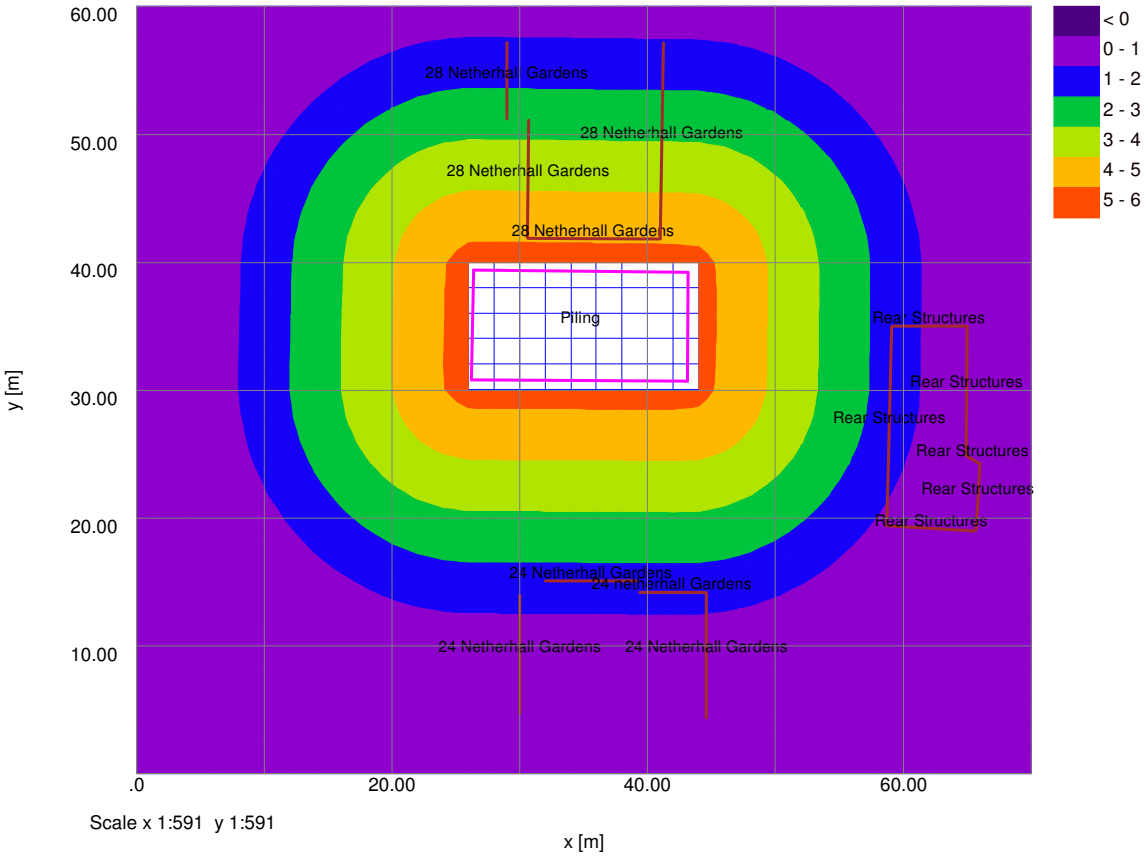
Site Plan

Damage assessment Plan

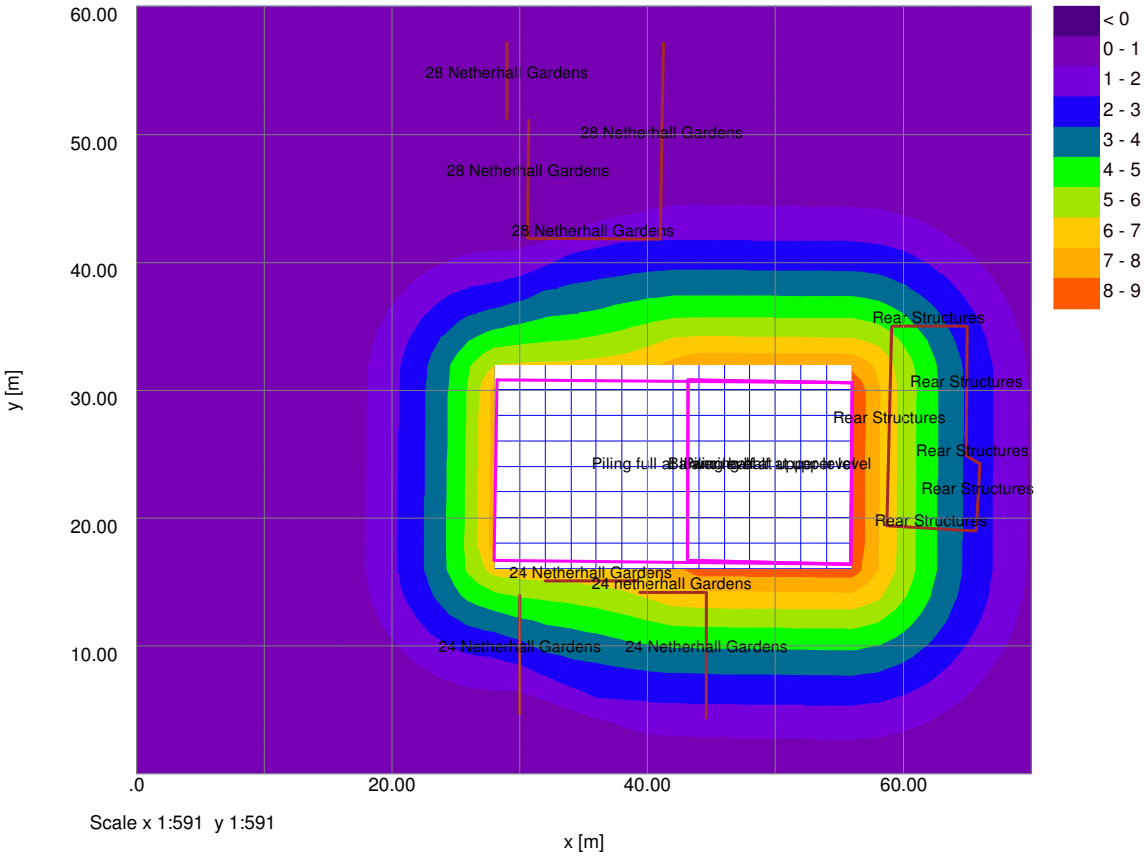
Horizontal Displacement Contours: Grid 1 (level 71.600m) Interval 1mm



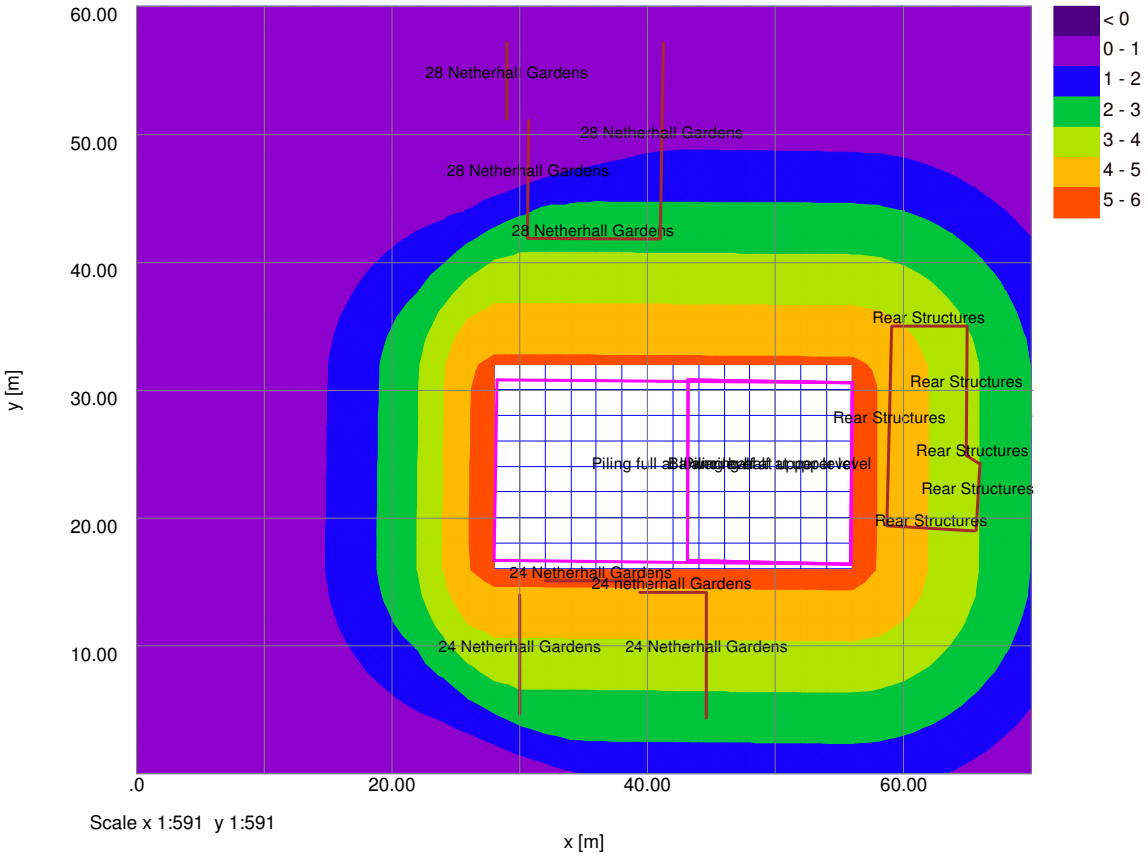
Vertical Settlement Contours: Grid 1 (level 71.600m) (Interval 1mm)



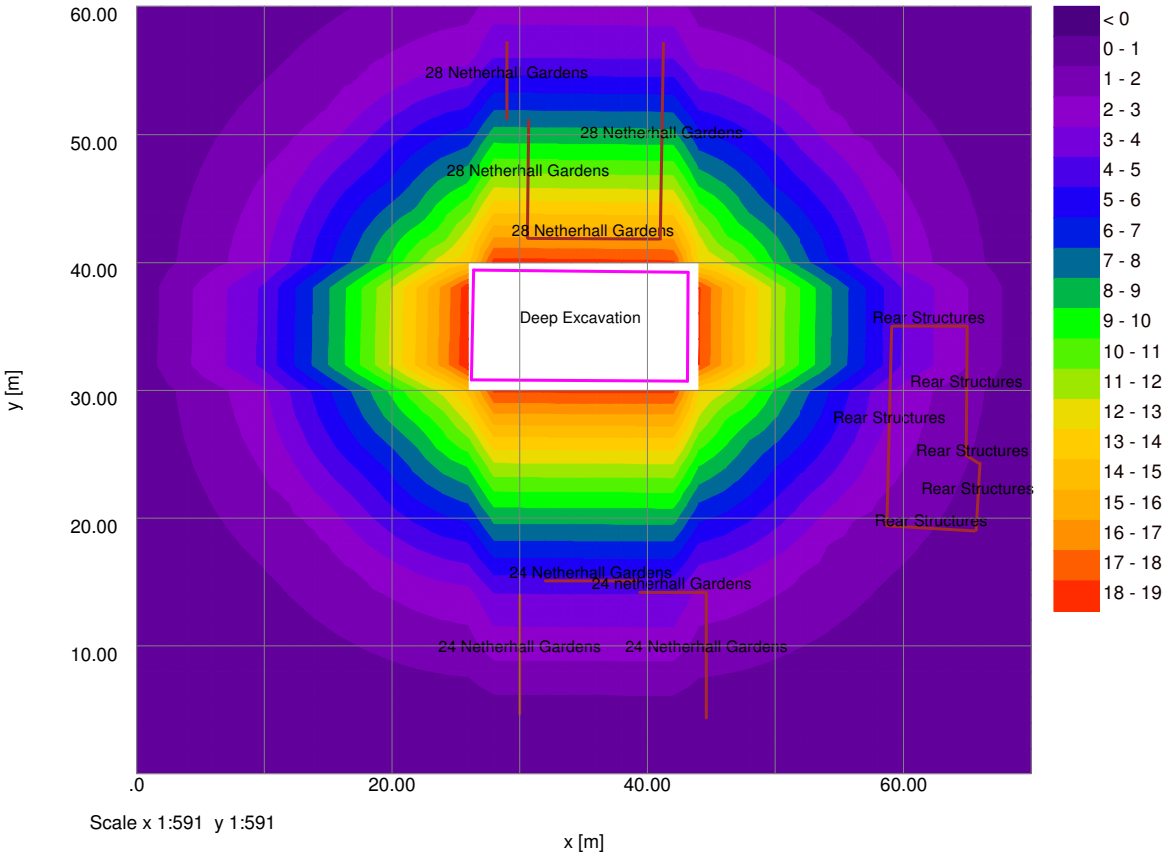
Horizontal Displacement Contours: Grid 1 (level 71.600m) Interval 1mm



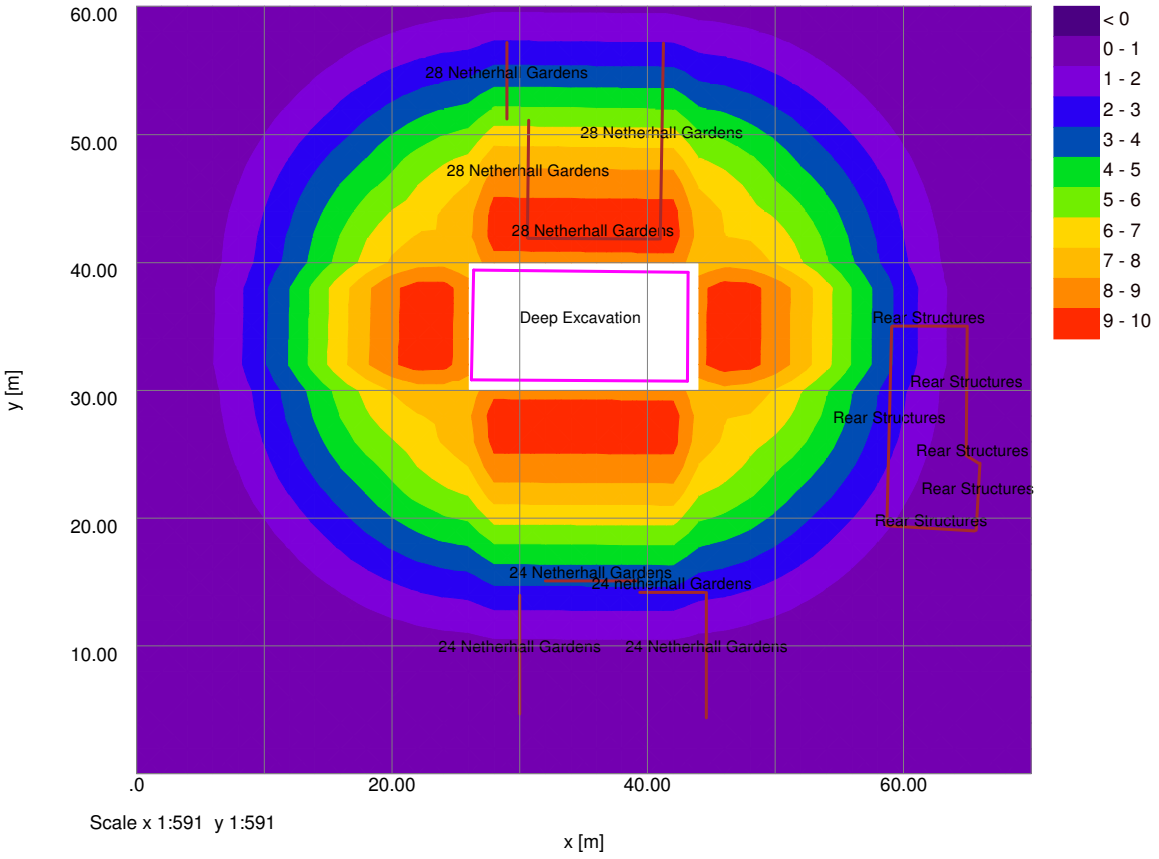
Vertical Settlement Contours: Grid 1 (level 71.600m) (Interval 1mm)



Horizontal Displacement Contours: Grid 1 (level 71.600m) Interval 1mm



Vertical Settlement Contours: Grid 1 (level 71.600m) (Interval 1mm)



Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type	Name	Direction of extrusion	Point/Line/Line for extrusion						No. of intervals across extrusion/line	Extrusion depth	No. of intervals along extrusion	Calculate	Surface type for tunnels
			First point			Second point							
			X [m]	Y [m]	Z(level) [m]	X [m]	Y [m]	Z(level) [m]		[m]			
Grid	Grid 1	Global X	0.00000	0.00000	71.60000	-	60.00000	71.60000	30	70.00000	35	Yes	Surface
Line	Line 1	-	30.00000	4.70000	71.00000	30.00000	14.10000	71.00000	10	-	-	Yes	Sub-surface
Line	Line 2	-	32.00000	15.10000	71.00000	39.20000	15.10000	71.00000	7	-	-	Yes	Sub-surface
Line	Line 3	-	39.40000	14.20000	71.00000	44.50000	14.20000	71.00000	6	-	-	Yes	Sub-surface
Line	Line 4	-	44.60000	14.20000	71.00000	44.60000	4.30000	71.00000	10	-	-	Yes	Sub-surface
Line	Line 5	-	29.00000	57.20000	71.60000	29.00000	51.10000	71.60000	6	-	-	Yes	Sub-surface
Line	Line 6	-	30.70000	51.10000	71.60000	30.60000	41.90000	71.60000	9	-	-	Yes	Sub-surface
Line	Line 7	-	30.65000	41.90000	71.60000	40.90000	41.80000	71.60000	10	-	-	Yes	Sub-surface
Line	Line 8	-	41.00000	41.80000	71.60000	41.20000	57.20000	71.60000	16	-	-	Yes	Sub-surface
Line	Line 9	-	58.70000	19.40000	77.00000	59.10000	35.00000	77.00000	16	-	-	Yes	Sub-surface
Line	Line 10	-	59.15000	35.00000	77.00000	64.95000	35.00000	77.00000	6	-	-	Yes	Sub-surface
Line	Line 11	-	65.00000	35.00000	77.00000	64.90000	24.90000	77.00000	10	-	-	Yes	Sub-surface
Line	Line 12	-	64.95000	24.90000	77.00000	65.95000	24.30000	77.00000	2	-	-	Yes	Sub-surface
Line	Line 13	-	66.00000	24.30000	77.00000	65.70000	19.00000	77.00000	5	-	-	Yes	Sub-surface
Line	Line 14	-	58.75000	19.40000	77.00000	65.65000	19.00000	77.00000	7	-	-	Yes	Sub-surface

Imported Displacements

The following data points and displacements were found in the import file Xdisp1 North Piling.csv.

Line No.	Coordinates			Displacements		
	x [m]	y [m]	z [m]	x [mm]	y [mm]	z [mm]
2601	0.0	0.0	71.600	0.0	0.0	0.0
2602	2.0000	0.0	71.600	0.0	0.0	0.0
2603	4.0000	0.0	71.600	0.0	0.0	0.0
2604	6.0000	0.0	71.600	0.0	0.0	0.0
2605	8.0000	0.0	71.600	0.0	0.0	0.0
2606	10.000	0.0	71.600	0.0	0.0	0.0
2607	12.000	0.0	71.600	0.0	0.0	0.0
2608	14.000	0.0	71.600	0.0	0.0	0.0
2609	16.000	0.0	71.600	0.0	0.0	0.0
2610	18.000	0.0	71.600	0.0	0.0	0.0
2611	20.000	0.0	71.600	0.0	0.0	0.0
2612	22.000	0.0	71.600	0.0	0.0	0.0
2613	24.000	0.0	71.600	0.0	0.0	0.0
2614	26.000	0.0	71.600	0.0	0.0	0.0
2615	28.000	0.0	71.600	0.0	0.0	0.0
2616	30.000	0.0	71.600	0.0	0.0	0.0
2617	32.000	0.0	71.600	0.0	0.0	0.0
2618	34.000	0.0	71.600	0.0	0.0	0.0
2619	36.000	0.0	71.600	0.0	0.0	0.0
2620	38.000	0.0	71.600	0.0	0.0	0.0
2621	40.000	0.0	71.600	0.0	0.0	0.0
2622	42.000	0.0	71.600	0.0	0.0	0.0
2623	44.000	0.0	71.600	0.0	0.0	0.0
2624	46.000	0.0	71.600	0.0	0.0	0.0
2625	48.000	0.0	71.600	0.0	0.0	0.0
2626	50.000	0.0	71.600	0.0	0.0	0.0
2627	52.000	0.0	71.600	0.0	0.0	0.0
2628	54.000	0.0	71.600	0.0	0.0	0.0
2629	56.000	0.0	71.600	0.0	0.0	0.0
2630	58.000	0.0	71.600	0.0	0.0	0.0
2631	60.000	0.0	71.600	0.0	0.0	0.0
2632	62.000	0.0	71.600	0.0	0.0	0.0
2633	64.000	0.0	71.600	0.0	0.0	0.0
2634	66.000	0.0	71.600	0.0	0.0	0.0
2635	68.000	0.0	71.600	0.0	0.0	0.0
2636	70.000	0.0	71.600	0.0	0.0	0.0
2637	0.0	2.0000	71.600	0.0	0.0	0.0
2638	2.0000	2.0000	71.600	0.0	0.0	0.0
2639	4.0000	2.0000	71.600	0.0	0.0	0.0
2640	6.0000	2.0000	71.600	0.0	0.0	0.0
2641	8.0000	2.0000	71.600	0.0	0.0	0.0
2642	10.000	2.0000	71.600	0.0	0.0	0.0
2643	12.000	2.0000	71.600	0.0	0.0	0.0
2644	14.000	2.0000	71.600	0.0	0.0	0.0
2645	16.000	2.0000	71.600	0.0	0.0	0.0
2646	18.000	2.0000	71.600	0.0	0.0	0.0
2647	20.000	2.0000	71.600	0.0	0.0	0.0
2648	22.000	2.0000	71.600	0.0	0.0	0.0
2649	24.000	2.0000	71.600	0.0	0.0	0.0
2650	26.000	2.0000	71.600	0.0	0.0	0.0
2651	28.000	2.0000	71.600	0.0	0.0	0.0
2652	30.000	2.0000	71.600	0.0	0.0	0.0
2653	32.000	2.0000	71.600	0.0	0.0	0.0
2654	34.000	2.0000	71.600	0.0	0.0	0.0
2655	36.000	2.0000	71.600	0.0	0.0	0.0
2656	38.000	2.0000	71.600	0.0	0.0	0.0
2657	40.000	2.0000	71.600	0.0	0.0	0.0
2658	42.000	2.0000	71.600	0.0	0.0	0.0
2659	44.000	2.0000	71.600	0.0	0.0	0.0
2660	46.000	2.0000	71.600	0.0	0.0	0.0
2661	48.000	2.0000	71.600	0.0	0.0	0.0
2662	50.000	2.0000	71.600	0.0	0.0	0.0
2663	52.000	2.0000	71.600	0.0	0.0	0.0
2664	54.000	2.0000	71.600	0.0	0.0	0.0
2665	56.000	2.0000	71.600	0.0	0.0	0.0
2666	58.000	2.0000	71.600	0.0	0.0	0.0
2667	60.000	2.0000	71.600	0.0	0.0	0.0
2668	62.000	2.0000	71.600	0.0	0.0	0.0
2669	64.000	2.0000	71.600	0.0	0.0	0.0
2670	66.000	2.0000	71.600	0.0	0.0	0.0
2671	68.000	2.0000	71.600	0.0	0.0	0.0
2672	70.000	2.0000	71.600	0.0	0.0	0.0
2673	0.0	4.0000	71.600	0.0	0.0	0.0
2674	2.0000	4.0000	71.600	0.0	0.0	0.0
2675	4.0000	4.0000	71.600	0.0	0.0	0.0
2676	6.0000	4.0000	71.600	0.0	0.0	0.0
2677	8.0000	4.0000	71.600	0.0	0.0	0.0
2678	10.000	4.0000	71.600	0.0	0.0	0.0
2679	12.000	4.0000	71.600	0.0	0.0	0.0
2680	14.000	4.0000	71.600	0.0	0.0	0.0
2681	16.000	4.0000	71.600	0.0	0.0	0.0
2682	18.000	4.0000	71.600	0.0	0.0	0.0
2683	20.000	4.0000	71.600	0.0	0.0	0.0
2684	22.000	4.0000	71.600	0.0	0.0	0.0
2685	24.000	4.0000	71.600	0.0	0.0	0.0
2686	26.000	4.0000	71.600	0.0	0.0	0.0
2687	28.000	4.0000	71.600	0.0	0.0	0.0
2688	30.000	4.0000	71.600	0.0	0.0	0.0
2689	32.000	4.0000	71.600	0.0	0.0	0.0
2690	34.000	4.0000	71.600	0.0	0.0	0.0
2691	36.000	4.0000	71.600	0.0	0.0	0.0

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
2692	38.000	4.0000	71.600	0.0	0.0	0.0
2693	40.000	4.0000	71.600	0.0	0.0	0.0
2694	42.000	4.0000	71.600	0.0	0.0	0.0
2695	44.000	4.0000	71.600	0.0	0.0	0.0
2696	46.000	4.0000	71.600	0.0	0.0	0.0
2697	48.000	4.0000	71.600	0.0	0.0	0.0
2698	50.000	4.0000	71.600	0.0	0.0	0.0
2699	52.000	4.0000	71.600	0.0	0.0	0.0
2700	54.000	4.0000	71.600	0.0	0.0	0.0
2701	56.000	4.0000	71.600	0.0	0.0	0.0
2702	58.000	4.0000	71.600	0.0	0.0	0.0
2703	60.000	4.0000	71.600	0.0	0.0	0.0
2704	62.000	4.0000	71.600	0.0	0.0	0.0
2705	64.000	4.0000	71.600	0.0	0.0	0.0
2706	66.000	4.0000	71.600	0.0	0.0	0.0
2707	68.000	4.0000	71.600	0.0	0.0	0.0
2708	70.000	4.0000	71.600	0.0	0.0	0.0
2709	0.0	6.0000	71.600	0.0	0.0	0.0
2710	2.0000	6.0000	71.600	0.0	0.0	0.0
2711	4.0000	6.0000	71.600	0.0	0.0	0.0
2712	6.0000	6.0000	71.600	0.0	0.0	0.0
2713	8.0000	6.0000	71.600	0.0	0.0	0.0
2714	10.000	6.0000	71.600	0.0	0.0	0.0
2715	12.000	6.0000	71.600	0.0	0.0	0.0
2716	14.000	6.0000	71.600	0.0	0.0	0.0
2717	16.000	6.0000	71.600	0.0	0.0	0.0
2718	18.000	6.0000	71.600	0.0	0.0	0.0
2719	20.000	6.0000	71.600	0.0	0.0	0.0
2720	22.000	6.0000	71.600	0.0	0.0	0.0
2721	24.000	6.0000	71.600	0.0	0.0	0.0
2722	26.000	6.0000	71.600	0.0	0.0	0.0
2723	28.000	6.0000	71.600	0.0	0.0	0.0
2724	30.000	6.0000	71.600	0.0	0.0	0.0
2725	32.000	6.0000	71.600	0.0	0.0	0.0
2726	34.000	6.0000	71.600	0.0	0.0	0.0
2727	36.000	6.0000	71.600	0.0	0.0	0.0
2728	38.000	6.0000	71.600	0.0	0.0	0.0
2729	40.000	6.0000	71.600	0.0	0.0	0.0
2730	42.000	6.0000	71.600	0.0	0.0	0.0
2731	44.000	6.0000	71.600	0.0	0.0	0.0
2732	46.000	6.0000	71.600	0.0	0.0	0.0
2733	48.000	6.0000	71.600	0.0	0.0	0.0
2734	50.000	6.0000	71.600	0.0	0.0	0.0
2735	52.000	6.0000	71.600	0.0	0.0	0.0
2736	54.000	6.0000	71.600	0.0	0.0	0.0
2737	56.000	6.0000	71.600	0.0	0.0	0.0
2738	58.000	6.0000	71.600	0.0	0.0	0.0
2739	60.000	6.0000	71.600	0.0	0.0	0.0
2740	62.000	6.0000	71.600	0.0	0.0	0.0
2741	64.000	6.0000	71.600	0.0	0.0	0.0
2742	66.000	6.0000	71.600	0.0	0.0	0.0
2743	68.000	6.0000	71.600	0.0	0.0	0.0
2744	70.000	6.0000	71.600	0.0	0.0	0.0
2745	0.0	8.0000	71.600	0.0	0.0	0.0
2746	2.0000	8.0000	71.600	0.0	0.0	0.0
2747	4.0000	8.0000	71.600	0.0	0.0	0.0
2748	6.0000	8.0000	71.600	0.0	0.0	0.0
2749	8.0000	8.0000	71.600	0.0	0.0	0.0
2750	10.000	8.0000	71.600	0.0	0.0	0.0
2751	12.000	8.0000	71.600	0.0	0.0	0.0
2752	14.000	8.0000	71.600	0.0	0.0	0.0
2753	16.000	8.0000	71.600	0.0	0.0	0.0
2754	18.000	8.0000	71.600	0.0	0.0	0.0
2755	20.000	8.0000	71.600	0.0	0.0	0.0
2756	22.000	8.0000	71.600	0.0	0.0	0.0
2757	24.000	8.0000	71.600	0.0	0.0	0.0
2758	26.000	8.0000	71.600	0.0	0.0	0.0
2759	28.000	8.0000	71.600	0.0	0.0	0.0
2760	30.000	8.0000	71.600	0.0	0.0	0.0
2761	32.000	8.0000	71.600	0.0	0.0	0.0
2762	34.000	8.0000	71.600	0.0	0.0	0.0
2763	36.000	8.0000	71.600	0.0	0.0	0.0
2764	38.000	8.0000	71.600	0.0	0.0	0.0
2765	40.000	8.0000	71.600	0.0	0.0	0.0
2766	42.000	8.0000	71.600	0.0	0.0	0.0
2767	44.000	8.0000	71.600	0.0	0.0	0.0
2768	46.000	8.0000	71.600	0.0	0.0	0.0
2769	48.000	8.0000	71.600	0.0	0.0	0.0
2770	50.000	8.0000	71.600	0.0	0.0	0.0
2771	52.000	8.0000	71.600	0.0	0.0	0.0
2772	54.000	8.0000	71.600	0.0	0.0	0.0
2773	56.000	8.0000	71.600	0.0	0.0	0.0
2774	58.000	8.0000	71.600	0.0	0.0	0.0
2775	60.000	8.0000	71.600	0.0	0.0	0.0
2776	62.000	8.0000	71.600	0.0	0.0	0.0
2777	64.000	8.0000	71.600	0.0	0.0	0.0
2778	66.000	8.0000	71.600	0.0	0.0	0.0
2779	68.000	8.0000	71.600	0.0	0.0	0.0
2780	70.000	8.0000	71.600	0.0	0.0	0.0
2781	0.0	10.000	71.600	0.0	0.0	0.0
2782	2.0000	10.000	71.600	0.0	0.0	0.0
2783	4.0000	10.000	71.600	0.0	0.0	0.0
2784	6.0000	10.000	71.600	0.0	0.0	0.0
2785	8.0000	10.000	71.600	0.0	0.0	0.0
2786	10.000	10.000	71.600	0.0	0.0	0.0
2787	12.000	10.000	71.600	0.0	0.0	0.0
2788	14.000	10.000	71.600	0.0	0.0	0.0
2789	16.000	10.000	71.600	0.0	0.0	0.0
2790	18.000	10.000	71.600	0.0	0.0	0.0
2791	20.000	10.000	71.600	0.0	0.0	0.12391
2792	22.000	10.000	71.600	0.0	0.0	0.24505
2793	24.000	10.000	71.600	0.0	0.0	0.32099
2794	26.000	10.000	71.600	0.0	0.0	0.34976
2795	28.000	10.000	71.600	0.0	0.0	0.35275
2796	30.000	10.000	71.600	0.0	0.0	0.35571
2797	32.000	10.000	71.600	0.0	0.0	0.35867
2798	34.000	10.000	71.600	0.0	0.0	0.36163
2799	36.000	10.000	71.600	0.0	0.0	0.36459
2800	38.000	10.000	71.600	0.0	0.0	0.36755
2801	40.000	10.000	71.600	0.0	0.0	0.37050
2802	42.000	10.000	71.600	0.0	0.0	0.37346
2803	44.000	10.000	71.600	0.0	0.0	0.37011
2804	46.000	10.000	71.600	0.0	0.0	0.32446
2805	48.000	10.000	71.600	0.0	0.0	0.23199
2806	50.000	10.000	71.600	0.0	0.0	0.095071
2807	52.000	10.000	71.600	0.0	0.0	0.0
2808	54.000	10.000	71.600	0.0	0.0	0.0
2809	56.000	10.000	71.600	0.0	0.0	0.0
2810	58.000	10.000	71.600	0.0	0.0	0.0
2811	60.000	10.000	71.600	0.0	0.0	0.0
2812	62.000	10.000	71.600	0.0	0.0	0.0
2813	64.000	10.000	71.600	0.0	0.0	0.0
2814	66.000	10.000	71.600	0.0	0.0	0.0
2815	68.000	10.000	71.600	0.0	0.0	0.0
2816	70.000	10.000	71.600	0.0	0.0	0.0
2817	0.0	12.000	71.600	0.0	0.0	0.0
2818	2.0000	12.000	71.600	0.0	0.0	0.0
2819	4.0000	12.000	71.600	0.0	0.0	0.0

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
2820	6.0000	12.000	71.600	0.0	0.0	0.0
2821	8.0000	12.000	71.600	0.0	0.0	0.0
2822	10.000	12.000	71.600	0.0	0.0	0.0
2823	12.000	12.000	71.600	0.0	0.0	0.0
2824	14.000	12.000	71.600	0.0	0.0	0.0
2825	16.000	12.000	71.600	0.0	0.0	0.20280
2826	18.000	12.000	71.600	0.0	0.0	0.42238
2827	20.000	12.000	71.600	0.0	0.0	0.60101
2828	22.000	12.000	71.600	0.0	0.0	0.73414
2829	24.000	12.000	71.600	0.0	0.0	0.81793
2830	26.000	12.000	71.600	0.0	0.0	0.84973
2831	28.000	12.000	71.600	0.0	0.0	0.85274
2832	30.000	12.000	71.600	0.0	0.0	0.85570
2833	32.000	12.000	71.600	0.0	0.0	0.85866
2834	34.000	12.000	71.600	0.0	0.0	0.86162
2835	36.000	12.000	71.600	0.0	0.0	0.86458
2836	38.000	12.000	71.600	0.0	0.0	0.86754
2837	40.000	12.000	71.600	0.0	0.0	0.87050
2838	42.000	12.000	71.600	0.0	0.0	0.87345
2839	44.000	12.000	71.600	0.0	0.0	0.86959
2840	46.000	12.000	71.600	0.0	0.0	0.81912
2841	48.000	12.000	71.600	0.0	0.0	0.71717
2842	50.000	12.000	71.600	0.0	0.0	0.56690
2843	52.000	12.000	71.600	0.0	0.0	0.37252
2844	54.000	12.000	71.600	0.0	0.0	0.13878
2845	56.000	12.000	71.600	0.0	0.0	0.0
2846	58.000	12.000	71.600	0.0	0.0	0.0
2847	60.000	12.000	71.600	0.0	0.0	0.0
2848	62.000	12.000	71.600	0.0	0.0	0.0
2849	64.000	12.000	71.600	0.0	0.0	0.0
2850	66.000	12.000	71.600	0.0	0.0	0.0
2851	68.000	12.000	71.600	0.0	0.0	0.0
2852	70.000	12.000	71.600	0.0	0.0	0.0
2853	0.0	14.000	71.600	0.0	0.0	0.0
2854	2.0000	14.000	71.600	0.0	0.0	0.0
2855	4.0000	14.000	71.600	0.0	0.0	0.0
2856	6.0000	14.000	71.600	0.0	0.0	0.0
2857	8.0000	14.000	71.600	0.0	0.0	0.0
2858	10.000	14.000	71.600	0.0	0.0	0.0
2859	12.000	14.000	71.600	0.0	0.0	0.050682
2860	14.000	14.000	71.600	0.0	0.0	0.35938
2861	16.000	14.000	71.600	0.0	0.0	0.63650
2862	18.000	14.000	71.600	0.0	0.0	0.87640
2863	20.000	14.000	71.600	0.0	0.0	1.0731
2864	22.000	14.000	71.600	0.0	0.0	1.2207
2865	24.000	14.000	71.600	0.0	0.0	1.3141
2866	26.000	14.000	71.600	0.0	0.0	1.3497
2867	28.000	14.000	71.600	0.0	0.0	1.3527
2868	30.000	14.000	71.600	0.0	0.0	1.3557
2869	32.000	14.000	71.600	0.0	0.0	1.3587
2870	34.000	14.000	71.600	0.0	0.0	1.3616
2871	36.000	14.000	71.600	0.0	0.0	1.3646
2872	38.000	14.000	71.600	0.0	0.0	1.3675
2873	40.000	14.000	71.600	0.0	0.0	1.3705
2874	42.000	14.000	71.600	0.0	0.0	1.3734
2875	44.000	14.000	71.600	0.0	0.0	1.3689
2876	46.000	14.000	71.600	0.0	0.0	1.3125
2877	48.000	14.000	71.600	0.0	0.0	1.1990
2878	50.000	14.000	71.600	0.0	0.0	1.0327
2879	52.000	14.000	71.600	0.0	0.0	0.81912
2880	54.000	14.000	71.600	0.0	0.0	0.56440
2881	56.000	14.000	71.600	0.0	0.0	0.27447
2882	58.000	14.000	71.600	0.0	0.0	0.0
2883	60.000	14.000	71.600	0.0	0.0	0.0
2884	62.000	14.000	71.600	0.0	0.0	0.0
2885	64.000	14.000	71.600	0.0	0.0	0.0
2886	66.000	14.000	71.600	0.0	0.0	0.0
2887	68.000	14.000	71.600	0.0	0.0	0.0
2888	70.000	14.000	71.600	0.0	0.0	0.0
2889	0.0	16.000	71.600	0.0	0.0	0.0
2890	2.0000	16.000	71.600	0.0	0.0	0.0
2891	4.0000	16.000	71.600	0.0	0.0	0.0
2892	6.0000	16.000	71.600	0.0	0.0	0.0
2893	8.0000	16.000	71.600	0.0	0.0	0.0
2894	10.000	16.000	71.600	0.0	0.0	0.064337
2895	12.000	16.000	71.600	0.0	0.0	0.42238
2896	14.000	16.000	71.600	0.0	0.0	0.75495
2897	16.000	16.000	71.600	0.0	0.0	1.0564
2898	18.000	16.000	71.600	0.0	0.0	1.3200
2899	20.000	16.000	71.600	0.082678	0.19736	1.5385
2900	22.000	16.000	71.600	0.12166	0.42870	1.7039
2901	24.000	16.000	71.600	0.087223	0.58677	1.8093
2902	26.000	16.000	71.600	0.0087795	0.64968	1.8497
2903	28.000	16.000	71.600	0.0038700	0.65403	1.8527
2904	30.000	16.000	71.600	0.0038945	0.65818	1.8557
2905	32.000	16.000	71.600	0.0039191	0.66233	1.8586
2906	34.000	16.000	71.600	0.0039437	0.66648	1.8616
2907	36.000	16.000	71.600	0.0039682	0.67063	1.8646
2908	38.000	16.000	71.600	0.0039928	0.67479	1.8675
2909	40.000	16.000	71.600	0.0040174	0.67894	1.8705
2910	42.000	16.000	71.600	0.0040420	0.68309	1.8734
2911	44.000	16.000	71.600	-0.041288	0.67438	1.8681
2912	46.000	16.000	71.600	-0.11341	0.57489	1.8042
2913	48.000	16.000	71.600	-0.12867	0.38602	1.6762
2914	50.000	16.000	71.600	-0.062179	0.13247	1.4903
2915	52.000	16.000	71.600	0.0	0.0	1.2539
2916	54.000	16.000	71.600	0.0	0.0	0.97493
2917	56.000	16.000	71.600	0.0	0.0	0.66060
2918	58.000	16.000	71.600	0.0	0.0	0.31729
2919	60.000	16.000	71.600	0.0	0.0	0.0
2920	62.000	16.000	71.600	0.0	0.0	0.0
2921	64.000	16.000	71.600	0.0	0.0	0.0
2922	66.000	16.000	71.600	0.0	0.0	0.0
2923	68.000	16.000	71.600	0.0	0.0	0.0
2924	70.000	16.000	71.600	0.0	0.0	0.0
2925	0.0	18.000	71.600	0.0	0.0	0.0
2926	2.0000	18.000	71.600	0.0	0.0	0.0
2927	4.0000	18.000	71.600	0.0	0.0	0.0
2928	6.0000	18.000	71.600	0.0	0.0	0.0
2929	8.0000	18.000	71.600	0.0	0.0	0.0
2930	10.000	18.000	71.600	0.0	0.0	0.38836
2931	12.000	18.000	71.600	0.0	0.0	0.77062
2932	14.000	18.000	71.600	0.0	0.0	1.1293
2933	16.000	18.000	71.600	0.063094	0.079176	1.4582
2934	18.000	18.000	71.600	0.27493	0.42916	1.7497
2935	20.000	18.000	71.600	0.37203	0.76807	1.9944
2936	22.000	18.000	71.600	0.34948	1.0651	2.1821
2937	24.000	18.000	71.600	0.21955	1.2774	2.3031
2938	26.000	18.000	71.600	0.021314	1.3641	2.3496
2939	28.000	18.000	71.600	0.0080995	1.3688	2.3527
2940	30.000	18.000	71.600	0.0081253	1.3732	2.3557
2941	32.000	18.000	71.600	0.0081510	1.3775	2.3586
2942	34.000	18.000	71.600	0.0081768	1.3819	2.3616
2943	36.000	18.000	71.600	0.0082026	1.3862	2.3646
2944	38.000	18.000	71.600	0.0082284	1.3906	2.3675
2945	40.000	18.000	71.600	0.0082542	1.3950	2.3705
2946	42.000	18.000	71.600	0.0082800	1.3993	2.3734
2947	44.000	18.000	71.600	-0.098252	1.3864	2.3670

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
2948	46.000	18.000	71.600	-0.28536	1.2497	2.2933
2949	48.000	18.000	71.600	-0.38529	0.99860	2.1469
2950	50.000	18.000	71.600	-0.36855	0.67835	1.9367
2951	52.000	18.000	71.600	-0.23093	0.32953	1.6730
2952	54.000	18.000	71.600	0.0	0.0	1.3660
2953	56.000	18.000	71.600	0.0	0.0	1.0244
2954	58.000	18.000	71.600	0.0	0.0	0.65549
2955	60.000	18.000	71.600	0.0	0.0	0.26500
2956	62.000	18.000	71.600	0.0	0.0	0.0
2957	64.000	18.000	71.600	0.0	0.0	0.0
2958	66.000	18.000	71.600	0.0	0.0	0.0
2959	68.000	18.000	71.600	0.0	0.0	0.0
2960	70.000	18.000	71.600	0.0	0.0	0.0
2961	0.0	20.000	71.600	0.0	0.0	0.0
2962	2.0000	20.000	71.600	0.0	0.0	0.0
2963	4.0000	20.000	71.600	0.0	0.0	0.0
2964	6.0000	20.000	71.600	0.0	0.0	0.0
2965	8.0000	20.000	71.600	0.0	0.0	0.25921
2966	10.000	20.000	71.600	0.0	0.0	0.68251
2967	12.000	20.000	71.600	0.0	0.0	1.0899
2968	14.000	20.000	71.600	0.095167	0.084246	1.4766
2969	16.000	20.000	71.600	0.43314	0.45862	1.8362
2970	18.000	20.000	71.600	0.65857	0.86739	2.1599
2971	20.000	20.000	71.600	0.74339	1.2949	2.4367
2972	22.000	20.000	71.600	0.66023	1.6977	2.6530
2973	24.000	20.000	71.600	0.40806	2.0032	2.7946
2974	26.000	20.000	71.600	0.039489	2.1324	2.8495
2975	28.000	20.000	71.600	0.012650	2.1379	2.8527
2976	30.000	20.000	71.600	0.012679	2.1427	2.8557
2977	32.000	20.000	71.600	0.012707	2.1475	2.8586
2978	34.000	20.000	71.600	0.012735	2.1523	2.8616
2979	36.000	20.000	71.600	0.012764	2.1571	2.8645
2980	38.000	20.000	71.600	0.012792	2.1619	2.8675
2981	40.000	20.000	71.600	0.012821	2.1667	2.8705
2982	42.000	20.000	71.600	0.012849	2.1715	2.8734
2983	44.000	20.000	71.600	-0.18094	2.1512	2.8656
2984	46.000	20.000	71.600	-0.52808	1.9484	2.7785
2985	48.000	20.000	71.600	-0.72942	1.5928	2.6078
2986	50.000	20.000	71.600	-0.75326	1.1681	2.3670
2987	52.000	20.000	71.600	-0.61485	0.73920	2.0706
2988	54.000	20.000	71.600	-0.34553	0.33919	1.7315
2989	56.000	20.000	71.600	0.0	0.0	1.3600
2990	58.000	20.000	71.600	0.0	0.0	0.96402
2991	60.000	20.000	71.600	0.0	0.0	0.54938
2992	62.000	20.000	71.600	0.0	0.0	0.12034
2993	64.000	20.000	71.600	0.0	0.0	0.0
2994	66.000	20.000	71.600	0.0	0.0	0.0
2995	68.000	20.000	71.600	0.0	0.0	0.0
2996	70.000	20.000	71.600	0.0	0.0	0.0
2997	0.0	22.000	71.600	0.0	0.0	0.0
2998	2.0000	22.000	71.600	0.0	0.0	0.0
2999	4.0000	22.000	71.600	0.0	0.0	0.0
3000	6.0000	22.000	71.600	0.0	0.0	0.041597
3001	8.0000	22.000	71.600	0.0	0.0	0.49604
3002	10.000	22.000	71.600	0.0	0.0	0.94104
3003	12.000	22.000	71.600	0.0	0.0	1.3736
3004	14.000	22.000	71.600	0.45840	0.33065	1.7893
3005	16.000	22.000	71.600	0.84874	0.73224	2.1821
3006	18.000	22.000	71.600	1.1267	1.2092	2.5429
3007	20.000	22.000	71.600	1.2370	1.7558	2.8588
3008	22.000	22.000	71.600	1.1079	2.3214	3.1123
3009	24.000	22.000	71.600	0.69692	2.7877	3.2823
3010	26.000	22.000	71.600	0.068085	2.9958	3.3494
3011	28.000	22.000	71.600	0.017766	3.0025	3.3527
3012	30.000	22.000	71.600	0.017799	3.0080	3.3557
3013	32.000	22.000	71.600	0.017831	3.0135	3.3586
3014	34.000	22.000	71.600	0.017864	3.0190	3.3616
3015	36.000	22.000	71.600	0.017896	3.0245	3.3645
3016	38.000	22.000	71.600	0.017929	3.0300	3.3675
3017	40.000	22.000	71.600	0.017962	3.0355	3.3705
3018	42.000	22.000	71.600	0.017994	3.0410	3.3734
3019	44.000	22.000	71.600	-0.31100	3.0064	3.3634
3020	46.000	22.000	71.600	-0.89441	2.6832	3.2573
3021	48.000	22.000	71.600	-1.2130	2.1537	3.0538
3022	50.000	22.000	71.600	-1.2500	1.5760	2.7740
3023	52.000	22.000	71.600	-1.0697	1.0456	2.4385
3024	54.000	22.000	71.600	-0.74350	0.59343	2.0634
3025	56.000	22.000	71.600	-0.31867	0.21492	1.6601
3026	58.000	22.000	71.600	0.0	0.0	1.2365
3027	60.000	22.000	71.600	0.0	0.0	0.79803
3028	62.000	22.000	71.600	0.0	0.0	0.34844
3029	64.000	22.000	71.600	0.0	0.0	0.0
3030	66.000	22.000	71.600	0.0	0.0	0.0
3031	68.000	22.000	71.600	0.0	0.0	0.0
3032	70.000	22.000	71.600	0.0	0.0	0.0
3033	0.0	24.000	71.600	0.0	0.0	0.0
3034	2.0000	24.000	71.600	0.0	0.0	0.0
3035	4.0000	24.000	71.600	0.0	0.0	0.0
3036	6.0000	24.000	71.600	0.0	0.0	0.22154
3037	8.0000	24.000	71.600	0.0	0.0	0.69279
3038	10.000	24.000	71.600	0.0	0.0	1.1577
3039	12.000	24.000	71.600	0.28841	0.13811	1.6139
3040	14.000	24.000	71.600	0.82448	0.45955	2.0582
3041	16.000	24.000	71.600	1.3028	0.86853	2.4853
3042	18.000	24.000	71.600	1.6884	1.4001	2.8868
3043	20.000	24.000	71.600	1.8961	2.0795	3.2495
3044	22.000	24.000	71.600	1.7777	2.8781	3.5519
3045	24.000	24.000	71.600	1.1737	3.6279	3.7632
3046	26.000	24.000	71.600	0.11750	3.9950	3.8493
3047	28.000	24.000	71.600	0.023693	4.0041	3.8527
3048	30.000	24.000	71.600	0.023731	4.0105	3.8557
3049	32.000	24.000	71.600	0.023769	4.0169	3.8586
3050	34.000	24.000	71.600	0.023807	4.0234	3.8616
3051	36.000	24.000	71.600	0.023845	4.0298	3.8645
3052	38.000	24.000	71.600	0.023883	4.0362	3.8675
3053	40.000	24.000	71.600	0.023921	4.0427	3.8704
3054	42.000	24.000	71.600	0.023959	4.0491	3.8734
3055	44.000	24.000	71.600	-0.53518	3.9841	3.8600
3056	46.000	24.000	71.600	-1.4827	3.4256	3.7248
3057	48.000	24.000	71.600	-1.9085	2.6096	3.4748
3058	50.000	24.000	71.600	-1.8869	1.8322	3.1456
3059	52.000	24.000	71.600	-1.5956	1.2012	2.7650
3060	54.000	24.000	71.600	-1.1645	0.71577	2.3514
3061	56.000	24.000	71.600	-0.65925	0.34240	1.9160
3062	58.000	24.000	71.600	-0.10196	0.045846	1.4657
3063	60.000	24.000	71.600	0.0	0.0	1.0051
3064	62.000	24.000	71.600	0.0	0.0	0.53689
3065	64.000	24.000	71.600	0.0	0.0	0.063084
3066	66.000	24.000	71.600	0.0	0.0	0.0
3067	68.000	24.000	71.600	0.0	0.0	0.0
3068	70.000	24.000	71.600	0.0	0.0	0.0
3069	0.0	26.000	71.600	0.0	0.0	0.0
3070	2.0000	26.000	71.600	0.0	0.0	0.0
3071	4.0000	26.000	71.600	0.0	0.0	0.0
3072	6.0000	26.000	71.600	0.0	0.0	0.35938
3073	8.0000	26.000	71.600	0.0	0.0	0.84442
3074	10.000	26.000	71.600	0.0	0.0	1.3260
3075	12.000	26.000	71.600	0.55312	0.18697	1.8027

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
3076	14.000	26.000	71.600	1.1646	0.45820	2.2724
3077	16.000	26.000	71.600	1.7596	0.82803	2.7318
3078	18.000	26.000	71.600	2.3138	1.3544	3.1746
3079	20.000	26.000	71.600	2.7342	2.1168	3.5898
3080	22.000	26.000	71.600	2.7860	3.1840	3.9555
3081	24.000	26.000	71.600	2.0315	4.4323	4.2300
3082	26.000	26.000	71.600	0.21542	5.1700	4.3490
3083	28.000	26.000	71.600	0.030674	5.1839	4.3527
3084	30.000	26.000	71.600	0.030719	5.1915	4.3556
3085	32.000	26.000	71.600	0.030764	5.1991	4.3586
3086	34.000	26.000	71.600	0.030809	5.2067	4.3616
3087	36.000	26.000	71.600	0.030854	5.2143	4.3645
3088	38.000	26.000	71.600	0.030899	5.2220	4.3675
3089	40.000	26.000	71.600	0.030944	5.2296	4.3704
3090	42.000	26.000	71.600	0.030990	5.2372	4.3734
3091	44.000	26.000	71.600	-0.97544	5.0939	4.3537
3092	46.000	26.000	71.600	-2.4827	4.0237	4.1693
3093	48.000	26.000	71.600	-2.8895	2.7716	3.8526
3094	50.000	26.000	71.600	-2.6530	1.8071	3.4628
3095	52.000	26.000	71.600	-2.1557	1.1384	3.0338
3096	54.000	26.000	71.600	-1.5730	0.67827	2.5825
3097	56.000	26.000	71.600	-0.96636	0.35208	2.1176
3098	58.000	26.000	71.600	-0.34517	0.10888	1.6441
3099	60.000	26.000	71.600	0.0	0.0	1.1647
3100	62.000	26.000	71.600	0.0	0.0	0.68109
3101	64.000	26.000	71.600	0.0	0.0	0.19451
3102	66.000	26.000	71.600	0.0	0.0	0.0
3103	68.000	26.000	71.600	0.0	0.0	0.0
3104	70.000	26.000	71.600	0.0	0.0	0.0
3105	0.0	28.000	71.600	0.0	0.0	0.0
3106	2.0000	28.000	71.600	0.0	0.0	0.0
3107	4.0000	28.000	71.600	0.0	0.0	0.0
3108	6.0000	28.000	71.600	0.0	0.0	0.45172
3109	8.0000	28.000	71.600	0.0	0.0	0.94647
3110	10.000	28.000	71.600	0.074370	0.012854	1.4400
3111	12.000	28.000	71.600	0.75049	0.14798	1.9316
3112	14.000	28.000	71.600	1.4321	0.32867	2.4207
3113	16.000	28.000	71.600	2.1449	0.58880	2.9057
3114	18.000	28.000	71.600	2.8962	0.98896	3.3838
3115	20.000	28.000	71.600	3.6425	1.6450	3.8493
3116	22.000	28.000	71.600	4.1769	2.7846	4.2881
3117	24.000	28.000	71.600	3.7161	4.7296	4.6598
3118	26.000	28.000	71.600	0.46809	6.5532	4.8482
3119	28.000	28.000	71.600	0.038955	6.5833	4.8527
3120	30.000	28.000	71.600	0.039008	6.5924	4.8556
3121	32.000	28.000	71.600	0.039061	6.6014	4.8586
3122	34.000	28.000	71.600	0.039115	6.6104	4.8616
3123	36.000	28.000	71.600	0.039168	6.6195	4.8645
3124	38.000	28.000	71.600	0.039222	6.6285	4.8675
3125	40.000	28.000	71.600	0.039276	6.6376	4.8704
3126	42.000	28.000	71.600	0.039329	6.6466	4.8734
3127	44.000	28.000	71.600	-2.0682	6.2047	4.8385
3128	46.000	28.000	71.600	-4.1964	3.9070	4.5594
3129	48.000	28.000	71.600	-4.1031	2.2609	4.1513
3130	50.000	28.000	71.600	-3.4236	1.3397	3.6976
3131	52.000	28.000	71.600	-2.6508	0.80418	3.2249
3132	54.000	28.000	71.600	-1.9043	0.47171	2.7426
3133	56.000	28.000	71.600	-1.2003	0.25123	2.2551
3134	58.000	28.000	71.600	-0.52170	0.094536	1.7643
3135	60.000	28.000	71.600	0.0	0.0	1.2714
3136	62.000	28.000	71.600	0.0	0.0	0.77703
3137	64.000	28.000	71.600	0.0	0.0	0.28158
3138	66.000	28.000	71.600	0.0	0.0	0.0
3139	68.000	28.000	71.600	0.0	0.0	0.0
3140	70.000	28.000	71.600	0.0	0.0	0.0
3141	0.0	30.000	71.600	0.0	0.0	0.0
3142	2.0000	30.000	71.600	0.0	0.0	0.0
3143	4.0000	30.000	71.600	0.0	0.0	0.0
3144	6.0000	30.000	71.600	0.0	0.0	0.49604
3145	8.0000	30.000	71.600	0.0	0.0	0.99561
3146	10.000	30.000	71.600	0.15286	0.0075488	1.4951
3147	12.000	30.000	71.600	0.85208	0.048004	1.9944
3148	14.000	30.000	71.600	1.5747	0.10326	2.4935
3149	16.000	30.000	71.600	2.3605	0.18513	2.9922
3150	18.000	30.000	71.600	3.2473	0.31681	3.4903
3151	20.000	30.000	71.600	4.2668	0.55056	3.9872
3152	22.000	30.000	71.600	5.4234	1.0330	4.4811
3153	24.000	30.000	71.600	6.5142	2.3688	4.9648
3154	26.000	30.000	71.600	1.9917	7.9668	5.3438
3155	28.000	30.000	71.600	0.048779	8.2437	5.3527
3156	30.000	30.000	71.600	0.048842	8.2544	5.3556
3157	32.000	30.000	71.600	0.048906	8.2651	5.3586
3158	34.000	30.000	71.600	0.048969	8.2758	5.3615
3159	36.000	30.000	71.600	0.049032	8.2865	5.3645
3160	38.000	30.000	71.600	0.049096	8.2972	5.3675
3161	40.000	30.000	71.600	0.049159	8.3079	5.3704
3162	42.000	30.000	71.600	0.049223	8.3187	5.3734
3163	44.000	30.000	71.600	-6.2610	4.8697	5.2650
3164	46.000	30.000	71.600	-6.2572	1.5104	4.8042
3165	48.000	30.000	71.600	-5.0307	0.71867	4.3126
3166	50.000	30.000	71.600	-3.9054	0.39620	3.8161
3167	52.000	30.000	71.600	-2.9298	0.23043	3.3181
3168	54.000	30.000	71.600	-2.0799	0.13357	2.8194
3169	56.000	30.000	71.600	-1.3193	0.071589	2.3203
3170	58.000	30.000	71.600	-0.60873	0.028598	1.8209
3171	60.000	30.000	71.600	0.0	0.0	1.3214
3172	62.000	30.000	71.600	0.0	0.0	0.82176
3173	64.000	30.000	71.600	0.0	0.0	0.32207
3174	66.000	30.000	71.600	0.0	0.0	0.0
3175	68.000	30.000	71.600	0.0	0.0	0.0
3176	70.000	30.000	71.600	0.0	0.0	0.0
3177	0.0	32.000	71.600	0.0	0.0	0.0
3178	2.0000	32.000	71.600	0.0	0.0	0.0
3179	4.0000	32.000	71.600	0.0	0.0	0.0
3180	6.0000	32.000	71.600	0.0	0.0	0.49439
3181	8.0000	32.000	71.600	0.0	0.0	0.99426
3182	10.000	32.000	71.600	0.15168	-0.0035274	1.4941
3183	12.000	32.000	71.600	0.85265	-0.019829	1.9940
3184	14.000	32.000	71.600	1.5782	-0.036703	2.4939
3185	16.000	32.000	71.600	2.3697	-0.055108	2.9937
3186	18.000	32.000	71.600	3.2683	-0.076006	3.4936
3187	20.000	32.000	71.600	4.3153	-0.10036	3.9934
3188	22.000	32.000	71.600	5.5521	-0.12912	4.4933
3189	24.000	32.000	71.600	7.0200	-0.16326	4.9932
3190	26.000	32.000	71.600	8.7602	-0.20372	5.4930
3191	28.000	32.000	71.600	0.0	0.0	0.0
3192	30.000	32.000	71.600	0.0	0.0	0.0
3193	32.000	32.000	71.600	0.0	0.0	0.0
3194	34.000	32.000	71.600	0.0	0.0	0.0
3195	36.000	32.000	71.600	0.0	0.0	0.0
3196	38.000	32.000	71.600	0.0	0.0	0.0
3197	40.000	32.000	71.600	0.0	0.0	0.0
3198	42.000	32.000	71.600	0.0	0.0	0.0
3199	44.000	32.000	71.600	-8.1576	0.095972	5.3288
3200	46.000	32.000	71.600	-6.5108	0.076598	4.8289
3201	48.000	32.000	71.600	-5.1229	0.060270	4.3289
3202	50.000	32.000	71.600	-3.9526	0.046501	3.8289
3203	52.000	32.000	71.600	-2.9586	0.034807	3.3290

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
3204	54.000	32.000	71.600	-2.0995	0.024700	2.8290
3205	56.000	32.000	71.600	-1.3340	0.015694	2.3290
3206	58.000	32.000	71.600	-0.62084	0.0073039	1.8291
3207	60.000	32.000	71.600	0.0	0.0	1.3291
3208	62.000	32.000	71.600	0.0	0.0	0.82915
3209	64.000	32.000	71.600	0.0	0.0	0.32918
3210	66.000	32.000	71.600	0.0	0.0	0.0
3211	68.000	32.000	71.600	0.0	0.0	0.0
3212	70.000	32.000	71.600	0.0	0.0	0.0
3213	0.0	34.000	71.600	0.0	0.0	0.0
3214	2.0000	34.000	71.600	0.0	0.0	0.0
3215	4.0000	34.000	71.600	0.0	0.0	0.0
3216	6.0000	34.000	71.600	0.0	0.0	0.48277
3217	8.0000	34.000	71.600	0.0	0.0	0.98263
3218	10.000	34.000	71.600	0.13534	-0.0031474	1.4825
3219	12.000	34.000	71.600	0.83623	-0.019447	1.9824
3220	14.000	34.000	71.600	1.5608	-0.036297	2.4822
3221	16.000	34.000	71.600	2.3502	-0.054656	2.9821
3222	18.000	34.000	71.600	3.2458	-0.075485	3.4820
3223	20.000	34.000	71.600	4.2890	-0.099744	3.9818
3224	22.000	34.000	71.600	5.5209	-0.12839	4.4817
3225	24.000	34.000	71.600	6.9829	-0.16239	4.9815
3226	26.000	34.000	71.600	8.7163	-0.20270	5.4814
3227	28.000	34.000	71.600	0.0	0.0	0.0
3228	30.000	34.000	71.600	0.0	0.0	0.0
3229	32.000	34.000	71.600	0.0	0.0	0.0
3230	34.000	34.000	71.600	0.0	0.0	0.0
3231	36.000	34.000	71.600	0.0	0.0	0.0
3232	38.000	34.000	71.600	0.0	0.0	0.0
3233	40.000	34.000	71.600	0.0	0.0	0.0
3234	42.000	34.000	71.600	0.0	0.0	0.0
3235	44.000	34.000	71.600	-8.1787	0.096220	5.3347
3236	46.000	34.000	71.600	-6.5286	0.076807	4.8348
3237	48.000	34.000	71.600	-5.1379	0.060446	4.3348
3238	50.000	34.000	71.600	-3.9653	0.046650	3.8348
3239	52.000	34.000	71.600	-2.9694	0.034934	3.3349
3240	54.000	34.000	71.600	-2.1090	0.024811	2.8349
3241	56.000	34.000	71.600	-1.3426	0.015796	2.3349
3242	58.000	34.000	71.600	-0.62908	0.0074010	1.8350
3243	60.000	34.000	71.600	0.0	0.0	1.3350
3244	62.000	34.000	71.600	0.0	0.0	0.83503
3245	64.000	34.000	71.600	0.0	0.0	0.33507
3246	66.000	34.000	71.600	0.0	0.0	0.0
3247	68.000	34.000	71.600	0.0	0.0	0.0
3248	70.000	34.000	71.600	0.0	0.0	0.0
3249	0.0	36.000	71.600	0.0	0.0	0.0
3250	2.0000	36.000	71.600	0.0	0.0	0.0
3251	4.0000	36.000	71.600	0.0	0.0	0.0
3252	6.0000	36.000	71.600	0.0	0.0	0.47114
3253	8.0000	36.000	71.600	0.0	0.0	0.97101
3254	10.000	36.000	71.600	0.11899	-0.0027672	1.4709
3255	12.000	36.000	71.600	0.81982	-0.019066	1.9707
3256	14.000	36.000	71.600	1.5433	-0.035891	2.4706
3257	16.000	36.000	71.600	2.3308	-0.054204	2.9705
3258	18.000	36.000	71.600	3.2235	-0.074965	3.4703
3259	20.000	36.000	71.600	4.2627	-0.099133	3.9702
3260	22.000	36.000	71.600	5.4898	-0.12767	4.4701
3261	24.000	36.000	71.600	6.9460	-0.16153	4.9699
3262	26.000	36.000	71.600	8.6726	-0.20169	5.4698
3263	28.000	36.000	71.600	0.0	0.0	0.0
3264	30.000	36.000	71.600	0.0	0.0	0.0
3265	32.000	36.000	71.600	0.0	0.0	0.0
3266	34.000	36.000	71.600	0.0	0.0	0.0
3267	36.000	36.000	71.600	0.0	0.0	0.0
3268	38.000	36.000	71.600	0.0	0.0	0.0
3269	40.000	36.000	71.600	0.0	0.0	0.0
3270	42.000	36.000	71.600	0.0	0.0	0.0
3271	44.000	36.000	71.600	-8.1998	0.096468	5.3406
3272	46.000	36.000	71.600	-6.5464	0.077017	4.8406
3273	48.000	36.000	71.600	-5.1529	0.060622	4.3407
3274	50.000	36.000	71.600	-3.9780	0.046800	3.8407
3275	52.000	36.000	71.600	-2.9803	0.035062	3.3407
3276	54.000	36.000	71.600	-2.1185	0.024923	2.8408
3277	56.000	36.000	71.600	-1.3513	0.015897	2.3408
3278	58.000	36.000	71.600	-0.63733	0.0074980	1.8408
3279	60.000	36.000	71.600	0.0	0.0	1.3409
3280	62.000	36.000	71.600	0.0	0.0	0.84091
3281	64.000	36.000	71.600	0.0	0.0	0.34095
3282	66.000	36.000	71.600	0.0	0.0	0.0
3283	68.000	36.000	71.600	0.0	0.0	0.0
3284	70.000	36.000	71.600	0.0	0.0	0.0
3285	0.0	38.000	71.600	0.0	0.0	0.0
3286	2.0000	38.000	71.600	0.0	0.0	0.0
3287	4.0000	38.000	71.600	0.0	0.0	0.0
3288	6.0000	38.000	71.600	0.0	0.0	0.45952
3289	8.0000	38.000	71.600	0.0	0.0	0.95938
3290	10.000	38.000	71.600	0.10263	-0.0023867	1.4592
3291	12.000	38.000	71.600	0.80343	-0.018684	1.9591
3292	14.000	38.000	71.600	1.5259	-0.035487	2.4590
3293	16.000	38.000	71.600	2.3114	-0.053754	2.9588
3294	18.000	38.000	71.600	3.2012	-0.074447	3.4587
3295	20.000	38.000	71.600	4.2366	-0.098525	3.9586
3296	22.000	38.000	71.600	5.4588	-0.12695	4.4584
3297	24.000	38.000	71.600	6.9092	-0.16068	4.9583
3298	26.000	38.000	71.600	8.6291	-0.20068	5.4582
3299	28.000	38.000	71.600	0.0	0.0	0.0
3300	30.000	38.000	71.600	0.0	0.0	0.0
3301	32.000	38.000	71.600	0.0	0.0	0.0
3302	34.000	38.000	71.600	0.0	0.0	0.0
3303	36.000	38.000	71.600	0.0	0.0	0.0
3304	38.000	38.000	71.600	0.0	0.0	0.0
3305	40.000	38.000	71.600	0.0	0.0	0.0
3306	42.000	38.000	71.600	0.0	0.0	0.0
3307	44.000	38.000	71.600	-8.2210	0.096717	5.3465
3308	46.000	38.000	71.600	-6.5643	0.077227	4.8465
3309	48.000	38.000	71.600	-5.1679	0.060799	4.3466
3310	50.000	38.000	71.600	-3.9907	0.046949	3.8466
3311	52.000	38.000	71.600	-2.9911	0.035190	3.3466
3312	54.000	38.000	71.600	-2.1280	0.025035	2.8467
3313	56.000	38.000	71.600	-1.3599	0.015999	2.3467
3314	58.000	38.000	71.600	-0.64558	0.0075950	1.8467
3315	60.000	38.000	71.600	0.0	0.0	1.3468
3316	62.000	38.000	71.600	0.0	0.0	0.84680
3317	64.000	38.000	71.600	0.0	0.0	0.34683
3318	66.000	38.000	71.600	0.0	0.0	0.0
3319	68.000	38.000	71.600	0.0	0.0	0.0
3320	70.000	38.000	71.600	0.0	0.0	0.0
3321	0.0	40.000	71.600	0.0	0.0	0.0
3322	2.0000	40.000	71.600	0.0	0.0	0.0
3323	4.0000	40.000	71.600	0.0	0.0	0.0
3324	6.0000	40.000	71.600	0.0	0.0	0.44779
3325	8.0000	40.000	71.600	0.0	0.0	0.94756
3326	10.000	40.000	71.600	0.085712	-0.0031358	1.4473
3327	12.000	40.000	71.600	0.78572	-0.032738	1.9469
3328	14.000	40.000	71.600	1.5058	-0.072860	2.4464
3329	16.000	40.000	71.600	2.2864	-0.13191	2.9457
3330	18.000	40.000	71.600	3.1672	-0.22623	3.4447
3331	20.000	40.000	71.600	4.1845	-0.39230	3.9430

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
3332	22.000	40.000	71.600	5.3613	-0.73109	4.4398
3333	24.000	40.000	71.600	6.6231	-1.6558	4.9315
3334	26.000	40.000	71.600	4.6071	-6.9106	5.3697
3335	28.000	40.000	71.600	-0.099976	-8.3980	5.3952
3336	30.000	40.000	71.600	-0.099717	-8.3763	5.3893
3337	32.000	40.000	71.600	-0.099459	-8.3545	5.3833
3338	34.000	40.000	71.600	-0.099201	-8.3329	5.3774
3339	36.000	40.000	71.600	-0.098943	-8.3112	5.3714
3340	38.000	40.000	71.600	-0.098686	-8.2896	5.3655
3341	40.000	40.000	71.600	-0.098429	-8.2681	5.3595
3342	42.000	40.000	71.600	-0.098173	-8.2466	5.3536
3343	44.000	40.000	71.600	-5.6141	-5.6141	5.2672
3344	46.000	40.000	71.600	-6.2407	-1.7831	4.8220
3345	48.000	40.000	71.600	-5.0650	-0.84416	4.3334
3346	50.000	40.000	71.600	-3.9458	-0.46421	3.8383
3347	52.000	40.000	71.600	-2.9686	-0.26987	3.3409
3348	54.000	40.000	71.600	-2.1158	-0.15672	2.8426
3349	56.000	40.000	71.600	-1.3530	-0.084565	2.3438
3350	58.000	40.000	71.600	-0.64170	-0.034686	1.8446
3351	60.000	40.000	71.600	0.0	0.0	1.3452
3352	62.000	40.000	71.600	0.0	0.0	0.84575
3353	64.000	40.000	71.600	0.0	0.0	0.34616
3354	66.000	40.000	71.600	0.0	0.0	0.0
3355	68.000	40.000	71.600	0.0	0.0	0.0
3356	70.000	40.000	71.600	0.0	0.0	0.0
3357	0.0	42.000	71.600	0.0	0.0	0.0
3358	2.0000	42.000	71.600	0.0	0.0	0.0
3359	4.0000	42.000	71.600	0.0	0.0	0.0
3360	6.0000	42.000	71.600	0.0	0.0	0.40875
3361	8.0000	42.000	71.600	0.0	0.0	0.90430
3362	10.000	42.000	71.600	0.017163	-0.0027209	1.3988
3363	12.000	42.000	71.600	0.69760	-0.12596	1.8918
3364	14.000	42.000	71.600	1.3828	-0.28994	2.3826
3365	16.000	42.000	71.600	2.1013	-0.52532	2.8700
3366	18.000	42.000	71.600	2.8666	-0.88727	3.3517
3367	20.000	42.000	71.600	3.6504	-1.4830	3.8230
3368	22.000	42.000	71.600	4.2879	-2.5338	4.2723
3369	24.000	42.000	71.600	4.0907	-4.4316	4.6654
3370	26.000	42.000	71.600	1.0196	-6.6272	4.8924
3371	28.000	42.000	71.600	-0.079925	-6.7137	4.8953
3372	30.000	42.000	71.600	-0.079707	-6.6954	4.8893
3373	32.000	42.000	71.600	-0.079488	-6.6770	4.8834
3374	34.000	42.000	71.600	-0.079270	-6.6587	4.8774
3375	36.000	42.000	71.600	-0.079053	-6.6404	4.8715
3376	38.000	42.000	71.600	-0.078836	-6.6222	4.8655
3377	40.000	42.000	71.600	-0.078619	-6.6040	4.8596
3378	42.000	42.000	71.600	-0.078403	-6.5859	4.8536
3379	44.000	42.000	71.600	-1.7831	-6.2407	4.8220
3380	46.000	42.000	71.600	-4.0555	-4.0555	4.5601
3381	48.000	42.000	71.600	-4.0662	-2.3719	4.1608
3382	50.000	42.000	71.600	-3.4260	-1.4107	3.7115
3383	52.000	42.000	71.600	-2.6678	-0.84884	3.2413
3384	54.000	42.000	71.600	-1.9268	-0.49954	2.7607
3385	56.000	42.000	71.600	-1.2253	-0.26803	2.2743
3386	58.000	42.000	71.600	-0.54851	-0.10377	1.7844
3387	60.000	42.000	71.600	0.0	0.0	1.2921
3388	62.000	42.000	71.600	0.0	0.0	0.79816
3389	64.000	42.000	71.600	0.0	0.0	0.30310
3390	66.000	42.000	71.600	0.0	0.0	0.0
3391	68.000	42.000	71.600	0.0	0.0	0.0
3392	70.000	42.000	71.600	0.0	0.0	0.0
3393	0.0	44.000	71.600	0.0	0.0	0.0
3394	2.0000	44.000	71.600	0.0	0.0	0.0
3395	4.0000	44.000	71.600	0.0	0.0	0.0
3396	6.0000	44.000	71.600	0.0	0.0	0.32195
3397	8.0000	44.000	71.600	0.0	0.0	0.80843
3398	10.000	44.000	71.600	0.0	0.0	1.2918
3399	12.000	44.000	71.600	0.51365	-0.16408	1.7708
3400	14.000	44.000	71.600	1.1341	-0.42071	2.2436
3401	16.000	44.000	71.600	1.7429	-0.77091	2.7070
3402	18.000	44.000	71.600	2.3225	-1.2718	3.1557
3403	20.000	44.000	71.600	2.7914	-2.0063	3.5796
3404	22.000	44.000	71.600	2.9293	-3.0624	3.9586
3405	24.000	44.000	71.600	2.2815	-4.3729	4.2529
3406	26.000	44.000	71.600	0.45871	-5.2752	4.3957
3407	28.000	44.000	71.600	-0.063022	-5.2938	4.3953
3408	30.000	44.000	71.600	-0.062838	-5.2784	4.3894
3409	32.000	44.000	71.600	-0.062654	-5.2629	4.3834
3410	34.000	44.000	71.600	-0.062470	-5.2475	4.3775
3411	36.000	44.000	71.600	-0.062287	-5.2321	4.3715
3412	38.000	44.000	71.600	-0.062104	-5.2168	4.3656
3413	40.000	44.000	71.600	-0.061922	-5.2014	4.3596
3414	42.000	44.000	71.600	-0.061740	-5.1861	4.3537
3415	44.000	44.000	71.600	-0.84416	-5.0650	4.3334
3416	46.000	44.000	71.600	-2.3719	-4.0662	4.1608
3417	48.000	44.000	71.600	-2.8318	-2.8318	3.8529
3418	50.000	44.000	71.600	-2.6323	-1.8581	3.4691
3419	52.000	44.000	71.600	-2.1554	-1.1757	3.0440
3420	54.000	44.000	71.600	-1.5834	-0.70372	2.5953
3421	56.000	44.000	71.600	-0.98280	-0.36855	2.1324
3422	58.000	44.000	71.600	-0.36584	-0.11865	1.6603
3423	60.000	44.000	71.600	0.0	0.0	1.1819
3424	62.000	44.000	71.600	0.0	0.0	0.69923
3425	64.000	44.000	71.600	0.0	0.0	0.21333
3426	66.000	44.000	71.600	0.0	0.0	0.0
3427	68.000	44.000	71.600	0.0	0.0	0.0
3428	70.000	44.000	71.600	0.0	0.0	0.0
3429	0.0	46.000	71.600	0.0	0.0	0.0
3430	2.0000	46.000	71.600	0.0	0.0	0.0
3431	4.0000	46.000	71.600	0.0	0.0	0.0
3432	6.0000	46.000	71.600	0.0	0.0	0.18973
3433	8.0000	46.000	71.600	0.0	0.0	0.66303
3434	10.000	46.000	71.600	0.0	0.0	1.1304
3435	12.000	46.000	71.600	0.26006	-0.11920	1.5899
3436	14.000	46.000	71.600	0.80818	-0.43016	2.0382
3437	16.000	46.000	71.600	1.3035	-0.82720	2.4706
3438	18.000	46.000	71.600	1.7151	-1.3476	2.8793
3439	20.000	46.000	71.600	1.9618	-2.0231	3.2516
3440	22.000	46.000	71.600	1.8930	-2.8394	3.5669
3441	24.000	46.000	71.600	1.3255	-3.6453	3.7943
3442	26.000	46.000	71.600	0.24808	-4.0933	3.8970
3443	28.000	46.000	71.600	-0.048774	-4.0970	3.8954
3444	30.000	46.000	71.600	-0.048618	-4.0839	3.8894
3445	32.000	46.000	71.600	-0.048463	-4.0709	3.8835
3446	34.000	46.000	71.600	-0.048308	-4.0579	3.8775
3447	36.000	46.000	71.600	-0.048153	-4.0449	3.8715
3448	38.000	46.000	71.600	-0.047999	-4.0319	3.8656
3449	40.000	46.000	71.600	-0.047845	-4.0190	3.8596
3450	42.000	46.000	71.600	-0.047691	-4.0060	3.8537
3451	44.000	46.000	71.600	-0.46421	-3.9458	3.8383
3452	46.000	46.000	71.600	-1.4107	-3.4260	3.7115
3453	48.000	46.000	71.600	-1.8581	-2.6323	3.4691
3454	50.000	46.000	71.600	-1.8601	-1.8601	3.1458
3455	52.000	46.000	71.600	-1.5863	-1.2258	2.7697
3456	54.000	46.000	71.600	-1.1667	-0.73457	2.3594
3457	56.000	46.000	71.600	-0.66909	-0.35546	1.9265
3458	58.000	46.000	71.600	-0.11745	-0.053965	1.4781
3459	60.000	46.000	71.600	0.0	0.0	1.0190

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
3460	62.000	46.000	71.600	0.0	0.0	0.55200
3461	64.000	46.000	71.600	0.0	0.0	0.079168
3462	66.000	46.000	71.600	0.0	0.0	0.0
3463	68.000	46.000	71.600	0.0	0.0	0.0
3464	70.000	46.000	71.600	0.0	0.0	0.0
3465	0.0	48.000	71.600	0.0	0.0	0.0
3466	2.0000	48.000	71.600	0.0	0.0	0.0
3467	4.0000	48.000	71.600	0.0	0.0	0.0
3468	6.0000	48.000	71.600	0.0	0.0	0.015337
3469	8.0000	48.000	71.600	0.0	0.0	0.47235
3470	10.000	48.000	71.600	0.0	0.0	0.92048
3471	12.000	48.000	71.600	0.0	0.0	1.3569
3472	14.000	48.000	71.600	0.45070	-0.31258	1.7774
3473	16.000	48.000	71.600	0.85729	-0.70891	2.1762
3474	18.000	48.000	71.600	1.1566	-1.1842	2.5446
3475	20.000	48.000	71.600	1.2931	-1.7376	2.8700
3476	22.000	48.000	71.600	1.1895	-2.3250	3.1349
3477	24.000	48.000	71.600	0.78982	-2.8302	3.3178
3478	26.000	48.000	71.600	0.14340	-3.0831	3.3977
3479	28.000	48.000	71.600	-0.036690	-3.0819	3.3954
3480	30.000	48.000	71.600	-0.036557	-3.0708	3.3894
3481	32.000	48.000	71.600	-0.036424	-3.0597	3.3835
3482	34.000	48.000	71.600	-0.036292	-3.0485	3.3775
3483	36.000	48.000	71.600	-0.036160	-3.0374	3.3716
3484	38.000	48.000	71.600	-0.036028	-3.0264	3.3656
3485	40.000	48.000	71.600	-0.035896	-3.0153	3.3597
3486	42.000	48.000	71.600	-0.035765	-3.0043	3.3537
3487	44.000	48.000	71.600	-0.26987	-2.9686	3.3409
3488	46.000	48.000	71.600	-0.84884	-2.6678	3.2413
3489	48.000	48.000	71.600	-1.1757	-2.1554	3.0440
3490	50.000	48.000	71.600	-1.2258	-1.5863	2.7697
3491	52.000	48.000	71.600	-1.0579	-1.0579	2.4387
3492	54.000	48.000	71.600	-0.74162	-0.60428	2.0672
3493	56.000	48.000	71.600	-0.32434	-0.22298	1.6667
3494	58.000	48.000	71.600	0.0	0.0	1.2454
3495	60.000	48.000	71.600	0.0	0.0	0.80869
3496	62.000	48.000	71.600	0.0	0.0	0.36059
3497	64.000	48.000	71.600	0.0	0.0	0.0
3498	66.000	48.000	71.600	0.0	0.0	0.0
3499	68.000	48.000	71.600	0.0	0.0	0.0
3500	70.000	48.000	71.600	0.0	0.0	0.0
3501	0.0	50.000	71.600	0.0	0.0	0.0
3502	2.0000	50.000	71.600	0.0	0.0	0.0
3503	4.0000	50.000	71.600	0.0	0.0	0.0
3504	6.0000	50.000	71.600	0.0	0.0	0.0
3505	8.0000	50.000	71.600	0.0	0.0	0.24128
3506	10.000	50.000	71.600	0.0	0.0	0.66815
3507	12.000	50.000	71.600	0.0	0.0	1.0798
3508	14.000	50.000	71.600	0.091362	-0.078100	1.4717
3509	16.000	50.000	71.600	0.44311	-0.45163	1.8375
3510	18.000	50.000	71.600	0.68430	-0.86353	2.1688
3511	20.000	50.000	71.600	0.78542	-1.3008	2.4544
3512	22.000	50.000	71.600	0.71490	-1.7223	2.6808
3513	24.000	50.000	71.600	0.46504	-2.0539	2.8329
3514	26.000	50.000	71.600	0.083407	-2.2103	2.8981
3515	28.000	50.000	71.600	-0.026277	-2.2073	2.8954
3516	30.000	50.000	71.600	-0.026162	-2.1976	2.8895
3517	32.000	50.000	71.600	-0.026046	-2.1879	2.8835
3518	34.000	50.000	71.600	-0.025930	-2.1782	2.8776
3519	36.000	50.000	71.600	-0.025815	-2.1685	2.8716
3520	38.000	50.000	71.600	-0.025700	-2.1588	2.8657
3521	40.000	50.000	71.600	-0.025585	-2.1491	2.8597
3522	42.000	50.000	71.600	-0.025470	-2.1395	2.8538
3523	44.000	50.000	71.600	-0.15672	-2.1158	2.8426
3524	46.000	50.000	71.600	-0.49954	-1.9268	2.7607
3525	48.000	50.000	71.600	-0.70372	-1.5834	2.5953
3526	50.000	50.000	71.600	-0.73457	-1.1667	2.3594
3527	52.000	50.000	71.600	-0.60428	-0.74162	2.0672
3528	54.000	50.000	71.600	-0.34254	-0.34254	1.7316
3529	56.000	50.000	71.600	0.0	0.0	1.3631
3530	58.000	50.000	71.600	0.0	0.0	0.96961
3531	60.000	50.000	71.600	0.0	0.0	0.55700
3532	62.000	50.000	71.600	0.0	0.0	0.12967
3533	64.000	50.000	71.600	0.0	0.0	0.0
3534	66.000	50.000	71.600	0.0	0.0	0.0
3535	68.000	50.000	71.600	0.0	0.0	0.0
3536	70.000	50.000	71.600	0.0	0.0	0.0
3537	0.0	52.000	71.600	0.0	0.0	0.0
3538	2.0000	52.000	71.600	0.0	0.0	0.0
3539	4.0000	52.000	71.600	0.0	0.0	0.0
3540	6.0000	52.000	71.600	0.0	0.0	0.0
3541	8.0000	52.000	71.600	0.0	0.0	0.0
3542	10.000	52.000	71.600	0.0	0.0	0.37965
3543	12.000	52.000	71.600	0.0	0.0	0.76643
3544	14.000	52.000	71.600	0.0	0.0	1.1304
3545	16.000	52.000	71.600	0.071024	-0.086048	1.4656
3546	18.000	52.000	71.600	0.29397	-0.44096	1.7642
3547	20.000	52.000	71.600	0.40095	-0.78937	2.0169
3548	22.000	52.000	71.600	0.38443	-1.1009	2.2135
3549	24.000	52.000	71.600	0.25356	-1.3312	2.3434
3550	26.000	52.000	71.600	0.045572	-1.4355	2.3984
3551	28.000	52.000	71.600	-0.017045	-1.4318	2.3955
3552	30.000	52.000	71.600	-0.016940	-1.4230	2.3895
3553	32.000	52.000	71.600	-0.016836	-1.4142	2.3836
3554	34.000	52.000	71.600	-0.016731	-1.4054	2.3776
3555	36.000	52.000	71.600	-0.016626	-1.3966	2.3717
3556	38.000	52.000	71.600	-0.016522	-1.3879	2.3657
3557	40.000	52.000	71.600	-0.016418	-1.3791	2.3598
3558	42.000	52.000	71.600	-0.016314	-1.3703	2.3538
3559	44.000	52.000	71.600	-0.084565	-1.3530	2.3438
3560	46.000	52.000	71.600	-0.26803	-1.2253	2.2743
3561	48.000	52.000	71.600	-0.36855	-0.98280	2.1324
3562	50.000	52.000	71.600	-0.35546	-0.66909	1.9265
3563	52.000	52.000	71.600	-0.22298	-0.32434	1.6667
3564	54.000	52.000	71.600	0.0	0.0	1.3631
3565	56.000	52.000	71.600	0.0	0.0	1.0245
3566	58.000	52.000	71.600	0.0	0.0	0.65817
3567	60.000	52.000	71.600	0.0	0.0	0.26985
3568	62.000	52.000	71.600	0.0	0.0	0.0
3569	64.000	52.000	71.600	0.0	0.0	0.0
3570	66.000	52.000	71.600	0.0	0.0	0.0
3571	68.000	52.000	71.600	0.0	0.0	0.0
3572	70.000	52.000	71.600	0.0	0.0	0.0
3573	0.0	54.000	71.600	0.0	0.0	0.0
3574	2.0000	54.000	71.600	0.0	0.0	0.0
3575	4.0000	54.000	71.600	0.0	0.0	0.0
3576	6.0000	54.000	71.600	0.0	0.0	0.0
3577	8.0000	54.000	71.600	0.0	0.0	0.0
3578	10.000	54.000	71.600	0.0	0.0	0.060692
3579	12.000	54.000	71.600	0.0	0.0	0.42335
3580	14.000	54.000	71.600	0.0	0.0	0.76121
3581	16.000	54.000	71.600	0.0	0.0	1.0687
3582	18.000	54.000	71.600	0.0	0.0	1.3390
3583	20.000	54.000	71.600	0.10069	-0.22970	1.5647
3584	22.000	54.000	71.600	0.14229	-0.47215	1.7378
3585	24.000	54.000	71.600	0.10570	-0.64301	1.8510
3586	26.000	54.000	71.600	0.019677	-0.71823	1.8986
3587	28.000	54.000	71.600	-0.0085005	-0.71404	1.8955

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]
3588	30.000	54.000	71.600	-0.0084009	-0.70568	1.8895
3589	32.000	54.000	71.600	-0.0083014	-0.69732	1.8836
3590	34.000	54.000	71.600	-0.0082019	-0.68896	1.8776
3591	36.000	54.000	71.600	-0.0081024	-0.68060	1.8717
3592	38.000	54.000	71.600	-0.0080029	-0.67225	1.8657
3593	40.000	54.000	71.600	-0.0079035	-0.66389	1.8598
3594	42.000	54.000	71.600	-0.0078041	-0.65554	1.8538
3595	44.000	54.000	71.600	-0.034686	-0.64170	1.8446
3596	46.000	54.000	71.600	-0.10377	-0.54851	1.7844
3597	48.000	54.000	71.600	-0.11865	-0.36584	1.6603
3598	50.000	54.000	71.600	-0.053965	-0.11745	1.4781
3599	52.000	54.000	71.600	0.0	0.0	1.2454
3600	54.000	54.000	71.600	0.0	0.0	0.96961
3601	56.000	54.000	71.600	0.0	0.0	0.65817
3602	58.000	54.000	71.600	0.0	0.0	0.31741
3603	60.000	54.000	71.600	0.0	0.0	0.0
3604	62.000	54.000	71.600	0.0	0.0	0.0
3605	64.000	54.000	71.600	0.0	0.0	0.0
3606	66.000	54.000	71.600	0.0	0.0	0.0
3607	68.000	54.000	71.600	0.0	0.0	0.0
3608	70.000	54.000	71.600	0.0	0.0	0.0
3609	0.0	56.000	71.600	0.0	0.0	0.0
3610	2.0000	56.000	71.600	0.0	0.0	0.0
3611	4.0000	56.000	71.600	0.0	0.0	0.0
3612	6.0000	56.000	71.600	0.0	0.0	0.0
3613	8.0000	56.000	71.600	0.0	0.0	0.0
3614	10.000	56.000	71.600	0.0	0.0	0.0
3615	12.000	56.000	71.600	0.0	0.0	0.056140
3616	14.000	56.000	71.600	0.0	0.0	0.36999
3617	16.000	56.000	71.600	0.0	0.0	0.65281
3618	18.000	56.000	71.600	0.0	0.0	0.89892
3619	20.000	56.000	71.600	0.0	0.0	1.1022
3620	22.000	56.000	71.600	0.0	0.0	1.2567
3621	24.000	56.000	71.600	0.0	0.0	1.3569
3622	26.000	56.000	71.600	418.60E-6	-0.017372	1.3988
3623	28.000	56.000	71.600	-151.94E-6	-0.012763	1.3955
3624	30.000	56.000	71.600	-51.749E-6	-0.0043469	1.3896
3625	32.000	56.000	71.600	0.0	0.0	1.3836
3626	34.000	56.000	71.600	0.0	0.0	1.3777
3627	36.000	56.000	71.600	0.0	0.0	1.3717
3628	38.000	56.000	71.600	0.0	0.0	1.3658
3629	40.000	56.000	71.600	0.0	0.0	1.3598
3630	42.000	56.000	71.600	0.0	0.0	1.3539
3631	44.000	56.000	71.600	0.0	0.0	1.3452
3632	46.000	56.000	71.600	0.0	0.0	1.2921
3633	48.000	56.000	71.600	0.0	0.0	1.1819
3634	50.000	56.000	71.600	0.0	0.0	1.0190
3635	52.000	56.000	71.600	0.0	0.0	0.80869
3636	54.000	56.000	71.600	0.0	0.0	0.55700
3637	56.000	56.000	71.600	0.0	0.0	0.26985
3638	58.000	56.000	71.600	0.0	0.0	0.0
3639	60.000	56.000	71.600	0.0	0.0	0.0
3640	62.000	56.000	71.600	0.0	0.0	0.0
3641	64.000	56.000	71.600	0.0	0.0	0.0
3642	66.000	56.000	71.600	0.0	0.0	0.0
3643	68.000	56.000	71.600	0.0	0.0	0.0
3644	70.000	56.000	71.600	0.0	0.0	0.0
3645	0.0	58.000	71.600	0.0	0.0	0.0
3646	2.0000	58.000	71.600	0.0	0.0	0.0
3647	4.0000	58.000	71.600	0.0	0.0	0.0
3648	6.0000	58.000	71.600	0.0	0.0	0.0
3649	8.0000	58.000	71.600	0.0	0.0	0.0
3650	10.000	58.000	71.600	0.0	0.0	0.0
3651	12.000	58.000	71.600	0.0	0.0	0.0
3652	14.000	58.000	71.600	0.0	0.0	0.0
3653	16.000	58.000	71.600	0.0	0.0	0.22248
3654	18.000	58.000	71.600	0.0	0.0	0.44779
3655	20.000	58.000	71.600	0.0	0.0	0.63243
3656	22.000	58.000	71.600	0.0	0.0	0.77166
3657	24.000	58.000	71.600	0.0	0.0	0.86145
3658	26.000	58.000	71.600	0.0	0.0	0.89892
3659	28.000	58.000	71.600	0.0	0.0	0.89557
3660	30.000	58.000	71.600	0.0	0.0	0.88962
3661	32.000	58.000	71.600	0.0	0.0	0.88366
3662	34.000	58.000	71.600	0.0	0.0	0.87771
3663	36.000	58.000	71.600	0.0	0.0	0.87176
3664	38.000	58.000	71.600	0.0	0.0	0.86581
3665	40.000	58.000	71.600	0.0	0.0	0.85986
3666	42.000	58.000	71.600	0.0	0.0	0.85390
3667	44.000	58.000	71.600	0.0	0.0	0.84575
3668	46.000	58.000	71.600	0.0	0.0	0.79816
3669	48.000	58.000	71.600	0.0	0.0	0.69923
3670	50.000	58.000	71.600	0.0	0.0	0.55200
3671	52.000	58.000	71.600	0.0	0.0	0.36059
3672	54.000	58.000	71.600	0.0	0.0	0.12967
3673	56.000	58.000	71.600	0.0	0.0	0.0
3674	58.000	58.000	71.600	0.0	0.0	0.0
3675	60.000	58.000	71.600	0.0	0.0	0.0
3676	62.000	58.000	71.600	0.0	0.0	0.0
3677	64.000	58.000	71.600	0.0	0.0	0.0
3678	66.000	58.000	71.600	0.0	0.0	0.0
3679	68.000	58.000	71.600	0.0	0.0	0.0
3680	70.000	58.000	71.600	0.0	0.0	0.0
3681	0.0	60.000	71.600	0.0	0.0	0.0
3682	2.0000	60.000	71.600	0.0	0.0	0.0
3683	4.0000	60.000	71.600	0.0	0.0	0.0
3684	6.0000	60.000	71.600	0.0	0.0	0.0
3685	8.0000	60.000	71.600	0.0	0.0	0.0
3686	10.000	60.000	71.600	0.0	0.0	0.0
3687	12.000	60.000	71.600	0.0	0.0	0.0
3688	14.000	60.000	71.600	0.0	0.0	0.0
3689	16.000	60.000	71.600	0.0	0.0	0.0
3690	18.000	60.000	71.600	0.0	0.0	0.0
3691	20.000	60.000	71.600	0.0	0.0	0.15718
3692	22.000	60.000	71.600	0.0	0.0	0.28383
3693	24.000	60.000	71.600	0.0	0.0	0.36517
3694	26.000	60.000	71.600	0.0	0.0	0.39903
3695	28.000	60.000	71.600	0.0	0.0	0.39560
3696	30.000	60.000	71.600	0.0	0.0	0.38965
3697	32.000	60.000	71.600	0.0	0.0	0.38370
3698	34.000	60.000	71.600	0.0	0.0	0.37775
3699	36.000	60.000	71.600	0.0	0.0	0.37180
3700	38.000	60.000	71.600	0.0	0.0	0.36584
3701	40.000	60.000	71.600	0.0	0.0	0.35989
3702	42.000	60.000	71.600	0.0	0.0	0.35394
3703	44.000	60.000	71.600	0.0	0.0	0.34616
3704	46.000	60.000	71.600	0.0	0.0	0.30310
3705	48.000	60.000	71.600	0.0	0.0	0.21333
3706	50.000	60.000	71.600	0.0	0.0	0.079168
3707	52.000	60.000	71.600	0.0	0.0	0.0
3708	54.000	60.000	71.600	0.0	0.0	0.0
3709	56.000	60.000	71.600	0.0	0.0	0.0
3710	58.000	60.000	71.600	0.0	0.0	0.0
3711	60.000	60.000	71.600	0.0	0.0	0.0
3712	62.000	60.000	71.600	0.0	0.0	0.0
3713	64.000	60.000	71.600	0.0	0.0	0.0
3714	66.000	60.000	71.600	0.0	0.0	0.0
3715	68.000	60.000	71.600	0.0	0.0	0.0

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
3716	70.000	60.000	71.600	0.0	0.0	0.0	1
3717	30.000	4.7000	71.000	0.0	0.0	0.0	1,2,6
3718	30.000	5.6400	71.000	0.0	0.0	0.0	1,2,6
3719	30.000	6.5800	71.000	0.0	0.0	0.0	1,2,6
3720	30.000	7.5200	71.000	0.0	0.0	0.0	1,2,6
3721	30.000	8.4600	71.000	0.0	0.0	0.0	1,2,6
3722	30.000	9.4000	71.000	0.0	0.0	0.20571	1,2,6
3723	30.000	10.340	71.000	0.0	0.0	0.44071	1,2,6
3724	30.000	11.280	71.000	0.0	0.0	0.67571	1,2,6
3725	30.000	12.220	71.000	0.0	0.0	0.91070	1,2,6
3726	30.000	13.160	71.000	0.0	0.0	1.1457	1,2,6
3727	30.000	14.100	71.000	0.0	0.0	1.3807	1,2,6
3728	32.000	15.100	71.000	0.0020553	0.34734	1.6336	1,2,6
3729	33.029	15.100	71.000	0.0020679	0.34947	1.6352	1,2,6
3730	34.057	15.100	71.000	0.0020805	0.35160	1.6367	1,2,6
3731	35.086	15.100	71.000	0.0020931	0.35373	1.6382	1,2,6
3732	36.114	15.100	71.000	0.0021057	0.35586	1.6397	1,2,6
3733	37.143	15.100	71.000	0.0021183	0.35799	1.6413	1,2,6
3734	38.171	15.100	71.000	0.0021309	0.36012	1.6428	1,2,6
3735	39.200	15.100	71.000	0.0021435	0.36225	1.6443	1,2,6
3736	39.400	14.200	71.000	276.70E-6	0.046762	1.4196	1,2,6
3737	40.250	14.200	71.000	287.20E-6	0.048536	1.4209	1,2,6
3738	41.100	14.200	71.000	297.70E-6	0.050311	1.4221	1,2,6
3739	41.950	14.200	71.000	308.20E-6	0.052085	1.4234	1,2,6
3740	42.800	14.200	71.000	318.70E-6	0.053860	1.4246	1,2,6
3741	43.650	14.200	71.000	-0.0017041	0.051124	1.4227	1,2,6
3742	44.500	14.200	71.000	-0.0028289	0.033341	1.4102	1,2,6
3743	44.600	14.200	71.000	-0.0027495	0.030244	1.4080	1,2,6
3744	44.600	13.210	71.000	0.0	0.0	1.1614	1,2,6
3745	44.600	12.220	71.000	0.0	0.0	0.91481	1,2,6
3746	44.600	11.230	71.000	0.0	0.0	0.66808	1,2,6
3747	44.600	10.240	71.000	0.0	0.0	0.42127	1,2,6
3748	44.600	9.2500	71.000	0.0	0.0	0.17440	1,2,6
3749	44.600	8.2600	71.000	0.0	0.0	0.0	1,2,6
3750	44.600	7.2700	71.000	0.0	0.0	0.0	1,2,6
3751	44.600	6.2800	71.000	0.0	0.0	0.0	1,2,6
3752	44.600	5.2900	71.000	0.0	0.0	0.0	1,2,6
3753	44.600	4.3000	71.000	0.0	0.0	0.0	1,2,6
3754	29.000	57.200	71.600	0.0	0.0	1.0926	1,2,6
3755	29.000	56.183	71.600	0.0	0.0	1.3467	1,2,6
3756	29.000	55.167	71.600	-0.0035886	-0.30145	1.6009	1,2,6
3757	29.000	54.150	71.600	-0.0078240	-0.65721	1.8550	1,2,6
3758	29.000	53.133	71.600	-0.012100	-1.0164	2.1092	1,2,6
3759	29.000	52.117	71.600	-0.016480	-1.3843	2.3633	1,2,6
3760	29.000	51.100	71.600	-0.021031	-1.7666	2.6175	1,2,6
3761	30.700	51.100	71.600	-0.020938	-1.7588	2.6124	1,2,6
3762	30.689	50.078	71.600	-0.025745	-2.1625	2.8680	1,2,6
3763	30.678	49.056	71.600	-0.030852	-2.5916	3.1236	1,2,6
3764	30.667	48.033	71.600	-0.036327	-3.0515	3.3791	1,2,6
3765	30.656	47.011	71.600	-0.042235	-3.5477	3.6347	1,2,6
3766	30.644	45.989	71.600	-0.048641	-4.0858	3.8903	1,2,6
3767	30.633	44.967	71.600	-0.055611	-4.6713	4.1458	1,2,6
3768	30.622	43.944	71.600	-0.063211	-5.3097	4.4014	1,2,6
3769	30.611	42.922	71.600	-0.071506	-6.0065	4.6570	1,2,6
3770	30.600	41.900	71.600	-0.080562	-6.7672	4.9125	1,2,6
3771	30.650	41.900	71.600	-0.080557	-6.7668	4.9124	1,2,6
3772	31.675	41.890	71.600	-0.080536	-6.7651	4.9118	1,2,6
3773	32.700	41.880	71.600	-0.080516	-6.7633	4.9113	1,2,6
3774	33.725	41.870	71.600	-0.080496	-6.7616	4.9107	1,2,6
3775	34.750	41.860	71.600	-0.080475	-6.7599	4.9102	1,2,6
3776	35.775	41.850	71.600	-0.080455	-6.7582	4.9096	1,2,6
3777	36.800	41.840	71.600	-0.080435	-6.7565	4.9091	1,2,6
3778	37.825	41.830	71.600	-0.080414	-6.7548	4.9085	1,2,6
3779	38.850	41.820	71.600	-0.080394	-6.7531	4.9080	1,2,6
3780	39.875	41.810	71.600	-0.080374	-6.7514	4.9074	1,2,6
3781	40.900	41.800	71.600	-0.080353	-6.7497	4.9069	1,2,6
3782	41.000	41.800	71.600	-0.080342	-6.7487	4.9066	1,2,6
3783	41.013	42.763	71.600	-0.071810	-6.0321	4.6659	1,2,6
3784	41.025	43.725	71.600	-0.063956	-5.3723	4.4253	1,2,6
3785	41.038	44.688	71.600	-0.056723	-4.7647	4.1847	1,2,6
3786	41.050	45.650	71.600	-0.050058	-4.2048	3.9440	1,2,6
3787	41.063	46.612	71.600	-0.043905	-3.6880	3.7034	1,2,6
3788	41.075	47.575	71.600	-0.038209	-3.2096	3.4627	1,2,6
3789	41.087	48.538	71.600	-0.032916	-2.7649	3.2221	1,2,6
3790	41.100	49.500	71.600	-0.027971	-2.3496	2.9814	1,2,6
3791	41.112	50.462	71.600	-0.023319	-1.9588	2.7408	1,2,6
3792	41.125	51.425	71.600	-0.018905	-1.5880	2.5001	1,2,6
3793	41.138	52.388	71.600	-0.014674	-1.2326	2.2595	1,2,6
3794	41.150	53.350	71.600	-0.010571	-0.88800	2.0189	1,2,6
3795	41.163	54.313	71.600	-0.0065425	-0.54957	1.7782	1,2,6
3796	41.175	55.275	71.600	-0.0025323	-0.21271	1.5376	1,2,6
3797	41.188	56.237	71.600	0.0	0.0	1.2969	1,2,6
3798	41.200	57.200	71.600	0.0	0.0	1.0563	1,2,6
3799	58.700	19.400	77.000	0.0	0.0	0.73434	1,2,6
3800	58.725	20.375	77.000	0.0	0.0	0.86794	1,2,6
3801	58.750	21.350	77.000	0.0	0.0	0.99242	1,2,6
3802	58.775	22.325	77.000	0.0	0.0	1.1070	1,2,6
3803	58.800	23.300	77.000	0.0	0.0	1.2109	1,2,6
3804	58.825	24.275	77.000	0.0	0.0	1.3033	1,2,6
3805	58.850	25.250	77.000	0.0	0.0	1.3834	1,2,6
3806	58.875	26.225	77.000	-0.087097	0.024707	1.4506	1,2,6
3807	58.900	27.200	77.000	-0.16202	0.035891	1.5042	1,2,6
3808	58.925	28.175	77.000	-0.21858	0.034876	1.5437	1,2,6
3809	58.950	29.150	77.000	-0.25503	0.024940	1.5686	1,2,6
3810	58.975	30.125	77.000	-0.27015	0.0097851	1.5786	1,2,6
3811	59.000	31.100	77.000	-0.26724	0.0031440	1.5765	1,2,6
3812	59.025	32.075	77.000	-0.26250	0.0030882	1.5731	1,2,6
3813	59.050	33.050	77.000	-0.25776	0.0030324	1.5697	1,2,6
3814	59.075	34.025	77.000	-0.25302	0.0029767	1.5663	1,2,6
3815	59.100	35.000	77.000	-0.24828	0.0029209	1.5629	1,2,6
3816	59.150	35.000	77.000	-0.23075	0.0027147	1.5504	1,2,6
3817	60.117	35.000	77.000	0.0	0.0	1.3088	1,2,6
3818	61.083	35.000	77.000	0.0	0.0	1.0671	1,2,6
3819	62.050	35.000	77.000	0.0	0.0	0.82547	1,2,6
3820	63.017	35.000	77.000	0.0	0.0	0.58382	1,2,6
3821	63.983	35.000	77.000	0.0	0.0	0.34217	1,2,6
3822	64.950	35.000	77.000	0.0	0.0	0.10052	1,2,6
3823	65.000	35.000	77.000	0.0	0.0	0.088025	1,2,6
3824	64.990	33.990	77.000	0.0	0.0	0.087554	1,2,6
3825	64.980	32.980	77.000	0.0	0.0	0.087084	1,2,6
3826	64.970	31.970	77.000	0.0	0.0	0.086613	1,2,6
3827	64.960	30.960	77.000	0.0	0.0	0.086143	1,2,6
3828	64.950	29.950	77.000	0.0	0.0	0.084283	1,2,6
3829	64.940	28.940	77.000	0.0	0.0	0.072300	1,2,6
3830	64.930	27.930	77.000	0.0	0.0	0.048740	1,2,6
3831	64.920	26.920	77.000	0.0	0.0	0.013751	1,2,6
3832	64.910	25.910	77.000	0.0	0.0	0.0	1,2,6
3833	64.900	24.900	77.000	0.0	0.0	0.0	1,2,6
3834	64.950	24.900	77.000	0.0	0.0	0.0	1,2,6
3835	65.450	24.600	77.000	0.0	0.0	0.0	1,2,6
3836	65.950	24.300	77.000	0.0	0.0	0.0	1,2,6
3837	66.000	24.300	77.000	0.0	0.0	0.0	1,2,6
3838	65.940	23.240	77.000	0.0	0.0	0.0	1,2,6
3839	65.880	22.180	77.000	0.0	0.0	0.0	1,2,6
3840	65.820	21.120	77.000	0.0	0.0	0.0	1,2,6
3841	65.760	20.060	77.000	0.0	0.0	0.0	1,2,6
3842	65.700	19.000	77.000	0.0	0.0	0.0	1,2,6
3843	58.750	19.400	77.000	0.0	0.0	0.72421	1,2,6

Line No.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
3844	59.736	19.343	77.000	0.0	0.0	0.51430	1,2,6
3845	60.721	19.286	77.000	0.0	0.0	0.30119	1,2,6
3846	61.707	19.229	77.000	0.0	0.0	0.085230	1,2,6
3847	62.693	19.171	77.000	0.0	0.0	0.0	1,2,6
3848	63.679	19.114	77.000	0.0	0.0	0.0	1,2,6
3849	64.664	19.057	77.000	0.0	0.0	0.0	1,2,6
3850	65.650	19.000	77.000	0.0	0.0	0.0	1,2,6

1 - Data point coincident with displacement data. Its displacement has been added to those calculated by Xdisp.
2 - Data point coincident with horizontal movement calculation point for a specific building. Its displacement has been added before performing building damage calculations.
6 - Data point coincident with vertical movement calculation point for a specific building. Its displacement has been added before performing building damage calculations.

Vertical Ground Movement Curves

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)**

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: $z = -2.6455E\text{-}3x^4 + 2.8495E\text{-}2x^3 - 1.0051E\text{-}1x^2 + 1.0569E\text{-}1x + 3.8990E\text{-}2$
Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))**

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: $z = -3.75E\text{-}2x + 1.50E\text{-}1$
Coeff. of Determination: 1.00

Polygonal Excavations

Excavation Name: **Deep Excavation**
Surface level [m]: 72.600
Contribution: Positive
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 65.800

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	p1 [%]	p2* [%]	Next Side d [m]	p1 [%]	p2* [%]
1	26.200	30.800	65.800	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	26.400	39.400	65.800	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	43.200	39.200	65.800	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	43.100	30.700	65.800	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve: Vertical	Ground Movement Curve: Horizontal
1	26.200	30.800	26.400	39.400	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	26.400	39.400	43.200	39.200	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	43.200	39.200	43.100	30.700	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	43.100	30.700	26.200	30.800	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Line	Start Distance Along Line [m]	End Distance Along Line [m]	Vertical Offsets from Line for Vertical Movement Calculations [m]	Vertical Displacement Limit Sensitivity [mm]	Damage Category Strains	Poisson's Ratio	E/G
24 Netherhall Gardens	Front	Line 1	0.00000	9.30000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 Netherhall Gardens	Side	Line 2	0.00000	7.10000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 netherhall Gardens	Rear Side	Line 3	0.00000	5.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 Netherhall Gardens	Rear	Line 4	0.00000	9.80000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Front North	Line 5	0.00000	6.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Front South	Line 6	0.00000	9.15000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Side	Line 7	0.00000	10.20000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Rear	Line 8	0.00000	15.30000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	West	Line 9	0.00000	15.55000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	North	Line 10	0.00000	5.70000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - North	Line 11	0.00000	10.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - Mid	Line 12	0.00000	1.10000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - South	Line 13	0.00000	5.25000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	South	Line 14	0.00000	6.85000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000

Specific Structures - Bending Parameters

Structure Name	Sub-Structure Name	Height	Default Properties	Hogging: 2nd Moment of Area	Hogging: Distance of Bending	Hogging: Distance of N.A.	Sagging: 2nd Moment of Area	Sagging: Distance of Bending	Sagging: Distance of N.A.

				(per unit width)	Strain from N.A.	from Edge of Beam in Tension	(per unit width)	Strain from N.A.	from Edge of Beam in Tension
		[m]		[m³]	[m]	[m]	[m³]	[m]	[m]
24 Netherhall Gardens	Front	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 Netherhall Gardens	Side	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 netherhall Gardens	Rear Side	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 Netherhall Gardens	Rear	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
28 Netherhall Gardens	Front North	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
28 Netherhall Gardens	Front South	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
28 Netherhall Gardens	Side	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
28 Netherhall Gardens	Rear	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
Rear Structures	West	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	North	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - North	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - Mid	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - South	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	South	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations	Segment Start	Length	Curvature	Combined Segment
		[m]	[m]	[m]		

No structures have segments combined.

Warnings

1 If an embedded wall excavation is assigned a 'surface' ground movement curve and if the 'allow movement calculation to level' option is checked for the excavation then displacements induced by it are calculated for points at the surface, and points below the surface to the level specified. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 1/Line 9/Vertical. This is an example only. There are 47 others.

Displacement and Strain Results

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement along the Line	Horizontal displacement perpendicular to Line	to x Axis	
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	
Grid 1	Grid 1	0.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		40.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		42.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		44.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		46.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		48.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		50.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		56.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		40.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		42.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		44.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		46.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		48.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		50.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		56.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		14.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	4.00000	71.60000	0.0026702	0.017039	0.0072327	-	-	-	*
		24.00000	4.00000	71.60000	0.0061461	0.074870	0.018410	-	-	-	*
		26.00000	4.00000	71.60000	739.95E-6	0.099154	0.022798	-	-	-	*
		28.00000	4.00000	71.60000	912.23E-6	0.15417	0.035196	-	-	-	*
		30.00000	4.00000	71.60000	938.49E-6	0.15860	0.035961	-	-	-	*
		32.00000	4.00000	71.60000	964.75E-6	0.16304	0.036721	-	-	-	*
		34.00000	4.00000	71.60000	991.01E-6	0.16748	0.037478	-	-	-	*
		36.00000	4.00000	71.60000	0.0010173	0.17192	0.038231	-	-	-	*
		38.00000	4.00000	71.60000	0.0010435	0.17636	0.038980	-	-	-	*
		40.00000	4.00000	71.60000	0.0010698	0.18079	0.039724	-	-	-	*
		42.00000	4.00000	71.60000	0.0010960	0.18523	0.040465	-	-	-	*
		44.00000	4.00000	71.60000	-0.0040588	0.12041	0.026436	-	-	-	*
		46.00000	4.00000	71.60000	-0.0089788	0.082667	0.019854	-	-	-	*
		48.00000	4.00000	71.60000	-0.0023094	0.012584	0.0063265	-	-	-	*
		50.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		56.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	6.00000	71.60000	0.031865	0.077475	0.019442	-	-	-	*
		18.00000	6.00000	71.60000	0.075774	0.22917	0.043367	-	-	-	*
		20.00000	6.00000	71.60000	0.091103	0.36441	0.059627	-	-	-	*
		22.00000	6.00000	71.60000	0.080533	0.47553	0.071277	-	-	-	*
		24.00000	6.00000	71.60000	0.049223	0.55487	0.079341	-	-	-	*
		26.00000	6.00000	71.60000	0.0048042	0.59572	0.083804	-	-	-	*
		28.00000	6.00000	71.60000	0.0053499	0.90414	0.12700	-	-	-	*
		30.00000	6.00000	71.60000	0.0053762	0.90858	0.12744	-	-	-	*
		32.00000	6.00000	71.60000	0.0054025	0.91302	0.12788	-	-	-	*
		34.00000	6.00000	71.60000	0.0054287	0.91745	0.12832	-	-	-	*
		36.00000	6.00000	71.60000	0.0054550	0.92189	0.12876	-	-	-	*
		38.00000	6.00000	71.60000	0.0054812	0.92633	0.12920	-	-	-	*
		40.00000	6.00000	71.60000	0.0055075	0.93077	0.12964	-	-	-	*
		42.00000	6.00000	71.60000	0.0055338	0.93520	0.13008	-	-	-	*
		44.00000	6.00000	71.60000	-0.022453	0.61621	0.085865	-	-	-	*
		46.00000	6.00000	71.60000	-0.065691	0.55950	0.079945	-	-	-	*
		48.00000	6.00000	71.60000	-0.092441	0.46598	0.070519	-	-	-	*
		50.00000	6.00000	71.60000	-0.095817	0.34300	0.057457	-	-	-	*
		52.00000	6.00000	71.60000	-0.071524	0.19850	0.039292	-	-	-	*
		54.00000	6.00000	71.60000	-0.017725	0.040165	0.012154	-	-	-	*
		56.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	8.00000	71.60000	0.036756	0.059017	0.016642	-	-	-	*
		14.00000	8.00000	71.60000	0.13284	0.24825	0.047523	-	-	-	*
		16.00000	8.00000	71.60000	0.19562	0.43727	0.068980	-	-	-	*
		18.00000	8.00000	71.60000	0.22269	0.61919	0.087540	-	-	-	*
		20.00000	8.00000	71.60000	0.21358	0.78543	0.10552	-	-	-	*
		22.00000	8.00000	71.60000	0.17061	0.92619	0.12234	-	-	-	*
		24.00000	8.00000	71.60000	0.099523	1.0314	0.13593	-	-	-	*
		26.00000	8.00000	71.60000	0.0095793	1.0920	0.14402	-	-	-	*
		28.00000	8.00000	71.60000	0.0097877	1.6541	0.21829	-	-	-	*
		30.00000	8.00000	71.60000	0.0098139	1.6586	0.21902	-	-	-	*
		32.00000	8.00000	71.60000	0.0098402	1.6630	0.21975	-	-	-	*
		34.00000	8.00000	71.60000	0.0098664	1.6674	0.22049	-	-	-	*
		36.00000	8.00000	71.60000	0.0098927	1.6719	0.22123	-	-	-	*
		38.00000	8.00000	71.60000	0.0099190	1.6763	0.22198	-	-	-	*
		40.00000	8.00000	71.60000	0.0099452	1.6807	0.22272	-	-	-	*
		42.00000	8.00000	71.60000	0.0099715	1.6852	0.22347	-	-	-	*
		44.00000	8.00000	71.60000	-0.044039	1.1108	0.14731	-	-	-	*
		46.00000	8.00000	71.60000	-0.13175	1.0313	0.13652	-	-	-	*
		48.00000	8.00000	71.60000	-0.19635	0.90960	0.12077	-	-	-	*
		50.00000	8.00000	71.60000	-0.22966	0.75554	0.10257	-	-	-	*
		52.00000	8.00000	71.60000	-0.22719	0.57947	0.083799	-	-	-	*
		54.00000	8.00000	71.60000	-0.18777	0.39105	0.064394	-	-	-	*
		56.00000	8.00000	71.60000	-0.11277	0.19844	0.040893	-	-	-	*
		58.00000	8.00000	71.60000	-0.0052333	0.0079729	0.0051521	-	-	-	*
		60.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	10.00000	71.60000	0.100085	0.12949	0.031560	-	-	-	*
		12.00000	10.00000	71.60000	0.22881	0.33516	0.060274	-	-	-	*
		14.00000	10.00000	71.60000	0.32294	0.55058	0.084272	-	-	-	*
		16.00000	10.00000	71.60000	0.37784	0.77049	0.11152	-	-	-	*
		18.00000	10.00000	71.60000	0.38914	0.98710	0.14437	-	-	-	*
		20.00000	10.00000	71.60000	0.35470	1.1900	0.30481	-	-	-	*
		22.00000	10.00000	71.60000	0.27594	1.3666	0.46150	-	-	-	*
		24.00000	10.00000	71.60000	0.15902	1.5034	0.56625	-	-	-	*
		26.00000	10.00000	71.60000	0.015270	1.5881	0.61189	-	-	-	*
		28.00000	10.00000	71.60000	0.014225	2.4041	0.75029	-	-	-	*
		30.00000	10.00000	71.60000	0.014252	2.4085	0.75470	-	-	-	*
		32.00000	10.00000	71.60000	0.014278	2.4130	0.75912	-	-	-	*
		34.00000	10.00000	71.60000	0.014304	2.4174	0.76354	-	-	-	*
		36.00000	10.00000	71.60000	0.014330	2.4218	0.76796	-	-	-	*
		38.00000	10.00000	71.60000	0.014357	2.4263	0.77239	-	-	-	*
		40.00000	10.00000	71.60000	0.014383	2.4307	0.77682	-	-	-	*
		42.00000	10.00000	71.60000	0.014409	2.4352	0.78126	-	-	-	*
		44.00000	10.00000	71.60000	-0.069727	1.6037	0.63837	-	-	-	*
		46.00000	10.00000	71.60000	-0.20965	1.4964	0.57011	-	-	-	*
		48.00000	10.00000	71.60000	-0.31729	1.3404	0.44430	-	-	-	*
		50.00000	10.00000	71.60000	-0.38301	1.1490	0.26913	-	-	-	*
		52.00000	10.00000	71.60000	-0.40243	0.93600	0.13671	-	-	-	*
		54.00000	10.00000	71.60000	-0.37570	0.71349	0.10442	-	-	-	*
		56.00000	10.00000	71.60000	-0.30609	0.49116	0.077972	-	-	-	*
		58.00000	10.00000	71.60000	-0.19864	0.27596	0.053378	-	-	-	*
		60.00000	10.00000	71.60000	-0.059066	0.072347	0.020570	-	-	-	*
		62.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements				Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		8.00000	12.00000	71.60000	0.13507	0.13952	0.035309	-	-	-	*
		10.00000	12.00000	71.60000	0.29942	0.34747	0.064654	-	-	-	*
		12.00000	12.00000	71.60000	0.43346	0.57388	0.093154	-	-	-	*
		14.00000	12.00000	71.60000	0.52978	0.81638	0.13183	-	-	-	*
		16.00000	12.00000	71.60000	0.58052	1.0700	0.38747	-	-	-	*
		18.00000	12.00000	71.60000	0.57846	1.3262	0.67215	-	-	-	*
		20.00000	12.00000	71.60000	0.51864	1.5726	0.92179	-	-	-	*
		22.00000	12.00000	71.60000	0.40058	1.7931	1.1227	-	-	-	*
		24.00000	12.00000	71.60000	0.23045	1.9693	1.2609	-	-	-	*
		26.00000	12.00000	71.60000	0.022167	2.0837	1.3251	-	-	-	*
		28.00000	12.00000	71.60000	0.018663	3.1541	1.5737	-	-	-	*
		30.00000	12.00000	71.60000	0.018689	3.1585	1.5790	-	-	-	*
		32.00000	12.00000	71.60000	0.018716	3.1629	1.5844	-	-	-	*
		34.00000	12.00000	71.60000	0.018742	3.1674	1.5898	-	-	-	*
		36.00000	12.00000	71.60000	0.018768	3.1718	1.5952	-	-	-	*
		38.00000	12.00000	71.60000	0.018794	3.1763	1.6006	-	-	-	*
		40.00000	12.00000	71.60000	0.018821	3.1807	1.6060	-	-	-	*
		42.00000	12.00000	71.60000	0.018847	3.1851	1.6114	-	-	-	*
		44.00000	12.00000	71.60000	-0.10080	2.0945	1.3542	-	-	-	*
		46.00000	12.00000	71.60000	-0.30281	1.9526	1.2610	-	-	-	*
		48.00000	12.00000	71.60000	-0.45959	1.7540	1.0963	-	-	-	*
		50.00000	12.00000	71.60000	-0.55987	1.5173	0.87328	-	-	-	*
		52.00000	12.00000	71.60000	-0.60014	1.2610	0.60625	-	-	-	*
		54.00000	12.00000	71.60000	-0.58298	1.0002	0.30868	-	-	-	*
		56.00000	12.00000	71.60000	-0.51466	0.74606	0.12010	-	-	-	*
		58.00000	12.00000	71.60000	-0.40308	0.50588	0.084521	-	-	-	*
		60.00000	12.00000	71.60000	-0.25625	0.28354	0.056947	-	-	-	*
		62.00000	12.00000	71.60000	-0.082430	0.081557	0.024068	-	-	-	*
		64.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	14.00000	71.60000	0.13649	0.11352	0.033235	-	-	-	*
		8.00000	14.00000	71.60000	0.33490	0.30914	0.063862	-	-	-	*
		10.00000	14.00000	71.60000	0.50402	0.52269	0.094068	-	-	-	*
		12.00000	14.00000	71.60000	0.64898	0.76781	0.19232	-	-	-	*
		14.00000	14.00000	71.60000	0.75305	1.0370	0.57216	-	-	-	*
		16.00000	14.00000	71.60000	0.80526	1.3263	0.94417	-	-	-	*
		18.00000	14.00000	71.60000	0.79428	1.6273	1.2967	-	-	-	*
		20.00000	14.00000	71.60000	0.71062	1.9255	1.6130	-	-	-	*
		22.00000	14.00000	71.60000	0.55010	2.2004	1.8732	-	-	-	*
		24.00000	14.00000	71.60000	0.31777	2.4266	2.0576	-	-	-	*
		26.00000	14.00000	71.60000	0.030699	2.5787	2.1492	-	-	-	*
		28.00000	14.00000	71.60000	0.023101	3.9040	2.5651	-	-	-	*
		30.00000	14.00000	71.60000	0.023127	3.9085	2.5714	-	-	-	*
		32.00000	14.00000	71.60000	0.023153	3.9129	2.5778	-	-	-	*
		34.00000	14.00000	71.60000	0.023180	3.9173	2.5842	-	-	-	*
		36.00000	14.00000	71.60000	0.023206	3.9218	2.5906	-	-	-	*
		38.00000	14.00000	71.60000	0.023232	3.9262	2.5970	-	-	-	*
		40.00000	14.00000	71.60000	0.023258	3.9307	2.6034	-	-	-	*
		42.00000	14.00000	71.60000	0.023285	3.9351	2.6098	-	-	-	*
		44.00000	14.00000	71.60000	-0.13917	2.5823	2.1794	-	-	-	*
		46.00000	14.00000	71.60000	-0.41611	2.3962	2.0507	-	-	-	*
		48.00000	14.00000	71.60000	-0.62900	2.1437	1.8335	-	-	-	*
		50.00000	14.00000	71.60000	-0.76507	1.8517	1.5465	-	-	-	*
		52.00000	14.00000	71.60000	-0.82322	1.5447	1.2105	-	-	-	*
		54.00000	14.00000	71.60000	-0.81039	1.2416	0.84480	-	-	-	*
		56.00000	14.00000	71.60000	-0.73750	0.95475	0.46493	-	-	-	*
		58.00000	14.00000	71.60000	-0.61633	0.69078	0.12572	-	-	-	*
		60.00000	14.00000	71.60000	-0.46354	0.45806	0.084715	-	-	-	*
		62.00000	14.00000	71.60000	-0.28759	0.25411	0.057332	-	-	-	*
		64.00000	14.00000	71.60000	-0.069191	0.055287	0.019810	-	-	-	*
		66.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	16.00000	71.60000	0.086330	0.057553	0.022402	-	-	-	*
		6.00000	16.00000	71.60000	0.34200	0.25058	0.061612	-	-	-	*
		8.00000	16.00000	71.60000	0.55865	0.45428	0.093223	-	-	-	*
		10.00000	16.00000	71.60000	0.72915	0.66614	0.20431	-	-	-	*
		12.00000	16.00000	71.60000	0.87176	0.90860	0.63975	-	-	-	*
		14.00000	16.00000	71.60000	0.99070	1.2018	1.0889	-	-	-	*
		16.00000	16.00000	71.60000	1.0525	1.5271	1.5392	-	-	-	*
		18.00000	16.00000	71.60000	1.0402	1.8774	1.9743	-	-	-	*
		20.00000	16.00000	71.60000	1.0198	2.4344	2.3717	-	-	-	*
		22.00000	16.00000	71.60000	0.85387	3.0089	2.7055	-	-	-	*
		24.00000	16.00000	71.60000	0.51407	3.4583	2.9489	-	-	-	*
		26.00000	16.00000	71.60000	0.050307	3.7227	3.0784	-	-	-	*
		28.00000	16.00000	71.60000	0.031409	5.3080	3.7161	-	-	-	*
		30.00000	16.00000	71.60000	0.031459	5.3166	3.7233	-	-	-	*
		32.00000	16.00000	71.60000	0.031510	5.3252	3.7305	-	-	-	*
		34.00000	16.00000	71.60000	0.031561	5.3338	3.7377	-	-	-	*
		36.00000	16.00000	71.60000	0.031612	5.3424	3.7450	-	-	-	*
		38.00000	16.00000	71.60000	0.031663	5.3510	3.7522	-	-	-	*
		40.00000	16.00000	71.60000	0.031713	5.3596	3.7595	-	-	-	*
		42.00000	16.00000	71.60000	0.031764	5.3682	3.7667	-	-	-	*
		44.00000	16.00000	71.60000	-0.22899	3.7402	3.1064	-	-	-	*
		46.00000	16.00000	71.60000	-0.67007	3.3966	2.9304	-	-	-	*
		48.00000	16.00000	71.60000	-0.96191	2.8857	2.6470	-	-	-	*
		50.00000	16.00000	71.60000	-1.0664	2.2718	2.2818	-	-	-	*
		52.00000	16.00000	71.60000	-1.0740	1.7739	1.8623	-	-	-	*
		54.00000	16.00000	71.60000	-1.0572	1.4258	1.4139	-	-	-	*
		56.00000	16.00000	71.60000	-0.97171	1.1073	0.95739	-	-	-	*
		58.00000	16.00000	71.60000	-0.84554	0.83419	0.50956	-	-	-	*
		60.00000	16.00000	71.60000	-0.70481	0.61306	0.12667	-	-	-	*
		62.00000	16.00000	71.60000	-0.51153	0.39786	0.084800	-	-	-	*
		64.00000	16.00000	71.60000	-0.27353	0.19239	0.052969	-	-	-	*
		66.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	18.00000	71.60000	0.27972	0.16128	0.051886	-	-	-	*
		6.00000	18.00000	71.60000	0.56009	0.35491	0.086656	-	-	-	*
		8.00000	18.00000	71.60000	0.80148	0.56368	0.13461	-	-	-	*
		10.00000	18.00000	71.60000	0.99519	0.78632	0.60272	-	-	-	*
		12.00000	18.00000	71.60000	1.1310	1.0195	1.1004	-	-	-	*
		14.00000	18.00000	71.60000	1.2377	1.2986	1.6178	-	-	-	*
		16.00000	18.00000	71.60000	1.3831	1.7357	2.1555	-	-	-	*
		18.00000	18.00000	71.60000	1.5934	2.4873	2.6827	-	-	-	*
		20.00000	18.00000	71.60000	1.5778	3.2574	3.1720	-	-	-	*
		22.00000	18.00000	71.60000	1.3073	3.9841	3.5911	-	-	-	*
		24.00000	18.00000	71.60000	0.78634	4.5751	3.9061	-	-	-	*
		26.00000	18.00000	71.60000	0.077035	4.9303	4.0857	-	-	-	*
		28.00000	18.00000	71.60000	0.040076	6.7728	4.9859	-	-	-	*
		30.00000	18.00000	71.60000	0.040128	6.7816	4.9937	-	-	-	*
		32.00000	18.00000	71.60000	0.040180	6.7904	5.0014	-	-	-	*
		34.00000	18.00000	71.60000	0.040232	6.7992	5.0091	-	-	-	*
		36.00000	18.00000	71.60000	0.040284	6.8080	5.0169	-	-	-	*
		38.00000	18.00000	71.60000	0.040336	6.8168	5.0246	-	-	-	*
		40.00000	18.00000	71.60000	0.040388	6.8256	5.0324	-	-	-	*
		42.00000	18.00000	71.60000	0.040440	6.8344	5.0401	-	-	-	*
		44.00000	18.00000	71.60000	-0.34932	4.9293	4.1060	-	-	-	*
		46.00000	18.00000	71.60000	-1.0205	4.4692	3.8700	-	-	-	*
		48.00000	18.00000	71.60000	-1.4679	3.8045	3.5079	-	-	-	*
		50.00000	18.00000	71.60000	-1.6515	3.0397	3.0532	-	-	-	*
		52.00000	18.00000	71.60000	-1.5838	2.2600	2.5401	-	-	-	*
		54.00000	18.00000	71.60000	-1.3198	1.5377	1.9999	-	-	-	*
		56.00000	18.00000	71.60000	-1.2288	1.2098	1.4644	-	-	-	*
		58.00000	18.00000	71.60000	-1.1333	0.96597	0.95448	-	-	-	*
		60.00000	18.00000	71.60000	-0.97064	0.72941	0.45564	-	-	-	*
		62.00000	18.00000	71.60000	-0.75236	0.50555	0.11974	-	-	-	*
		64.00000	18.00000	71.60000	-0.48855	0.29687	0.077474	-	-	-	*
		66.00000	18.00000	71.60000	-0.18763	0.10406	0.039213	-	-	-	*
		68.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		2.00000	20.00000	71.60000	0.13624	0.060801	0.029987	-	-	- *
		4.00000	20.00000	71.60000	0.47597	0.23155	0.073464	-	-	- *
		6.00000	20.00000	71.60000	0.78633	0.42041	0.11697	-	-	- *
		8.00000	20.00000	71.60000	1.0596	0.62880	0.45204	-	-	- *
		10.00000	20.00000	71.60000	1.2860	0.85734	0.99841	-	-	- *
		12.00000	20.00000	71.60000	1.4527	1.1049	1.5750	-	-	- *
		14.00000	20.00000	71.60000	1.6394	1.4513	2.1623	-	-	- *
		16.00000	20.00000	71.60000	2.0339	2.1536	2.7626	-	-	- *
		18.00000	20.00000	71.60000	2.2866	3.0117	3.3844	-	-	- *
		20.00000	20.00000	71.60000	2.2674	3.9496	3.9697	-	-	- *
		22.00000	20.00000	71.60000	1.9023	4.8916	4.4814	-	-	- *
		24.00000	20.00000	71.60000	1.1604	5.6967	4.8789	-	-	- *
		26.00000	20.00000	71.60000	0.11463	6.1899	5.1222	-	-	- *
		28.00000	20.00000	71.60000	0.049064	8.2918	6.3016	-	-	- *
		30.00000	20.00000	71.60000	0.049119	8.3011	6.3093	-	-	- *
		32.00000	20.00000	71.60000	0.049173	8.3103	6.3170	-	-	- *
		34.00000	20.00000	71.60000	0.049228	8.3195	6.3248	-	-	- *
		36.00000	20.00000	71.60000	0.049283	8.3288	6.3325	-	-	- *
		38.00000	20.00000	71.60000	0.049337	8.3380	6.3402	-	-	- *
		40.00000	20.00000	71.60000	0.049392	8.3473	6.3479	-	-	- *
		42.00000	20.00000	71.60000	0.049447	8.3565	6.3556	-	-	- *
		44.00000	20.00000	71.60000	-0.51819	6.1607	5.1270	-	-	- *
		46.00000	20.00000	71.60000	-1.4965	5.5217	4.8178	-	-	- *
		48.00000	20.00000	71.60000	-2.1196	4.6286	4.3674	-	-	- *
		50.00000	20.00000	71.60000	-2.3586	3.6576	3.8173	-	-	- *
		52.00000	20.00000	71.60000	-2.2704	2.7296	3.2077	-	-	- *
		54.00000	20.00000	71.60000	-1.9597	1.9237	2.5875	-	-	- *
		56.00000	20.00000	71.60000	-1.5787	1.3094	1.9995	-	-	- *
		58.00000	20.00000	71.60000	-1.4539	1.0441	1.4036	-	-	- *
		60.00000	20.00000	71.60000	-1.2579	0.79642	0.82820	-	-	- *
		62.00000	20.00000	71.60000	-1.0058	0.56940	0.28843	-	-	- *
		64.00000	20.00000	71.60000	-0.70951	0.36324	0.10320	-	-	- *
		66.00000	20.00000	71.60000	-0.37849	0.17685	0.062981	-	-	- *
		68.00000	20.00000	71.60000	-0.019852	0.0085308	0.0078408	-	-	- *
		70.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	- *
		0.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	22.00000	71.60000	0.29828	0.10847	0.052324	-	-	- *
		4.00000	22.00000	71.60000	0.66861	0.26503	0.093868	-	-	- *
		6.00000	22.00000	71.60000	1.0137	0.44159	0.19678	-	-	- *
		8.00000	22.00000	71.60000	1.3259	0.64110	0.76249	-	-	- *
		10.00000	22.00000	71.60000	1.5951	0.86648	1.3803	-	-	- *
		12.00000	22.00000	71.60000	1.8071	1.1199	2.0415	-	-	- *
		14.00000	22.00000	71.60000	2.4010	1.7319	2.7209	-	-	- *
		16.00000	22.00000	71.60000	2.8249	2.4372	3.3791	-	-	- *
		18.00000	22.00000	71.60000	3.0856	3.3114	4.0293	-	-	- *
		20.00000	22.00000	71.60000	3.1323	4.4458	4.7054	-	-	- *
		22.00000	22.00000	71.60000	2.7133	5.6849	5.3090	-	-	- *
		24.00000	22.00000	71.60000	1.7060	6.8249	5.7957	-	-	- *
		26.00000	22.00000	71.60000	0.17140	7.5434	6.1178	-	-	- *
		28.00000	22.00000	71.60000	0.058618	9.9065	7.5577	-	-	- *
		30.00000	22.00000	71.60000	0.058677	9.9164	7.5647	-	-	- *
		32.00000	22.00000	71.60000	0.058736	9.9263	7.5717	-	-	- *
		34.00000	22.00000	71.60000	0.058794	9.9362	7.5787	-	-	- *
		36.00000	22.00000	71.60000	0.058853	9.9462	7.5856	-	-	- *
		38.00000	22.00000	71.60000	0.058912	9.9561	7.5926	-	-	- *
		40.00000	22.00000	71.60000	0.058971	9.9661	7.5996	-	-	- *
		42.00000	22.00000	71.60000	0.059030	9.9760	7.6065	-	-	- *
		44.00000	22.00000	71.60000	-0.77217	7.4643	6.0961	-	-	- *
		46.00000	22.00000	71.60000	-2.1779	6.5336	5.7014	-	-	- *
		48.00000	22.00000	71.60000	-2.9837	5.2975	5.1592	-	-	- *
		50.00000	22.00000	71.60000	-3.2184	4.0580	4.5171	-	-	- *
		52.00000	22.00000	71.60000	-3.0726	3.0035	3.8420	-	-	- *
		54.00000	22.00000	71.60000	-2.7944	2.2304	3.2127	-	-	- *
		56.00000	22.00000	71.60000	-2.2923	1.5460	2.5302	-	-	- *
		58.00000	22.00000	71.60000	-1.8017	1.0520	1.8423	-	-	- *
		60.00000	22.00000	71.60000	-1.5593	0.80269	1.1848	-	-	- *
		62.00000	22.00000	71.60000	-1.2641	0.58189	0.57795	-	-	- *
		64.00000	22.00000	71.60000	-0.92920	0.38680	0.13405	-	-	- *
		66.00000	22.00000	71.60000	-0.56398	0.21426	0.082076	-	-	- *
		68.00000	22.00000	71.60000	-0.17529	0.061247	0.035834	-	-	- *
		70.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	- *
		0.00000	24.00000	71.60000	0.028922	0.0075064	0.0095903	-	-	- *
		2.00000	24.00000	71.60000	0.44659	0.12549	0.068386	-	-	- *
		4.00000	24.00000	71.60000	0.84915	0.26010	0.11527	-	-	- *
		6.00000	24.00000	71.60000	1.2320	0.41474	0.42075	-	-	- *
		8.00000	24.00000	71.60000	1.5887	0.59359	1.0418	-	-	- *
		10.00000	24.00000	71.60000	1.9099	0.80169	1.7315	-	-	- *
		12.00000	24.00000	71.60000	2.4703	1.1830	2.4780	-	-	- *
		14.00000	24.00000	71.60000	3.2086	1.7884	3.2511	-	-	- *
		16.00000	24.00000	71.60000	3.7885	2.5256	4.0042	-	-	- *
		18.00000	24.00000	71.60000	4.1297	3.4246	4.6776	-	-	- *
		20.00000	24.00000	71.60000	4.2031	4.6098	5.3092	-	-	- *
		22.00000	24.00000	71.60000	3.8470	6.2285	5.9902	-	-	- *
		24.00000	24.00000	71.60000	2.5571	7.9037	6.5634	-	-	- *
		26.00000	24.00000	71.60000	0.26538	9.0230	6.9803	-	-	- *
		28.00000	24.00000	71.60000	0.068982	11.658	8.6166	-	-	- *
		30.00000	24.00000	71.60000	0.069046	11.669	8.6220	-	-	- *
		32.00000	24.00000	71.60000	0.069111	11.680	8.6273	-	-	- *
		34.00000	24.00000	71.60000	0.069175	11.691	8.6327	-	-	- *
		36.00000	24.00000	71.60000	0.069239	11.701	8.6380	-	-	- *
		38.00000	24.00000	71.60000	0.069304	11.712	8.6433	-	-	- *
		40.00000	24.00000	71.60000	0.069368	11.723	8.6486	-	-	- *
		42.00000	24.00000	71.60000	0.069433	11.734	8.6538	-	-	- *
		44.00000	24.00000	71.60000	-1.1893	8.8540	6.9176	-	-	- *
		46.00000	24.00000	71.60000	-3.2065	7.4081	6.4281	-	-	- *
		48.00000	24.00000	71.60000	-4.1396	5.6603	5.8029	-	-	- *
		50.00000	24.00000	71.60000	-4.2850	4.1608	5.1263	-	-	- *
		52.00000	24.00000	71.60000	-4.1655	3.1358	4.5311	-	-	- *
		54.00000	24.00000	71.60000	-3.7163	2.2843	3.8102	-	-	- *
		56.00000	24.00000	71.60000	-3.0618	1.5903	3.0307	-	-	- *
		58.00000	24.00000	71.60000	-2.2654	1.0187	2.2498	-	-	- *
		60.00000	24.00000	71.60000	-1.8618	0.73811	1.5099	-	-	- *
		62.00000	24.00000	71.60000	-1.5159	0.53737	0.83565	-	-	- *
		64.00000	24.00000	71.60000	-1.1378	0.36475	0.23233	-	-	- *
		66.00000	24.00000	71.60000	-0.73589	0.21530	0.099993	-	-	- *
		68.00000	24.00000	71.60000	-0.31594	0.085013	0.054346	-	-	- *
		70.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	- *
		0.00000	26.00000	71.60000	0.12883	0.023602	0.027724	-	-	- *
		2.00000	26.00000	71.60000	0.57315	0.11368	0.080950	-	-	- *
		4.00000	26.00000	71.60000	1.0075	0.21784	0.13663	-	-	- *
		6.00000	26.00000	71.60000	1.4287	0.33949	0.60318	-	-	- *
		8.00000	26.00000	71.60000	1.8320	0.48317	1.2751	-	-	- *
		10.00000	26.00000	71.60000	2.2106	0.65499	2.0311	-	-	- *
		12.00000	26.00000	71.60000	3.1067	1.0501	2.8575	-	-	- *
		14.00000	26.00000	71.60000	4.0080	1.5769	3.7206	-	-	- *
		16.00000	26.00000	71.60000	4.8105	2.2638	4.5680	-	-	- *
		18.00000	26.00000	71.60000	5.4386	3.1836	5.3298	-	-	- *
		20.00000	26.00000	71.60000	5.7089	4.4198	5.9239	-	-	- *
		22.00000	26.00000	71.60000	5.4169	6.1907	6.4317	-	-	- *
		24.00000	26.00000	71.60000	3.9935	8.7130	7.0674	-	-	- *
		26.00000	26.00000	71.60000	0.44444	10.667	7.5954	-	-	- *
		28.00000	26.00000	71.60000	0.080401	13.588	9.3084	-	-	- *
		30.00000	26.00000	71.60000	0.080472	13.600	9.3110	-	-	- *
		32.00000	26.00000	71.60000	0.080544	13.612	9.3136	-	-	- *
		34.00000	26.00000	71.60000	0.080615	13.624	9.3162	-	-	- *
		36.00000	26.00000	71.60000	0.080686	13.636	9.3187	-	-	- *
		38.00000	26.00000	71.60000	0.080758	13.648	9.3213	-	-	- *
		40.00000	26.00000	71.60000	0.080829	13.660	9.3238	-	-	- *
		42.00000	26.00000	71.60000	0.080901	13.672	9.3263	-	-	- *
		44.00000	26.00000	71.60000	-1.9698	10.287	7.4707	-	-	- *
		46.00000	26.00000	71.60000	-4.8317	7.8306	6.8878	-	-	- *
		48.00000	26.00000	71.60000	-5.6971	5.4646	6.2740	-	-	- *
		50.00000	26.00000	71.60000	-5.8334	3.9735	5.8310	-	-	- *
		52.00000	26.00000	71.60000	-5.3866	2.8446	5.1582	-	-	- *
		54.00000	26.00000	71.60000	-4.6646	2.0113	4.3441	-	-	- *
		56.00000	26.00000	71.60000	-3.8053	1.3864	3.4696	-	-	- *
		58.00000	26.00000	71.60000	-2.8608	0.90240	2.6006	-	-	- *
		60.00000	26.00000	71.60000	-2.1463	0.59690	1.7844	-	-	- *
		62.00000	26.00000	71.60000	-1.7457	0.43412	1.0484	-	-	- *
		64.00000	26.00000	71.60000	-1.3231	0.29755	0.39933	-	-	- *
		66.00000	26.00000	71.60000	-0.88461	0.18156	0.11695	-	-	- *

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		68.00000	26.00000	71.60000	-0.43420	0.081957	0.067333	-	-	-	*
		70.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	28.00000	71.60000	0.20150	0.021534	0.038788	-	-	-	*
		2.00000	28.00000	71.60000	0.66965	0.077480	0.090599	-	-	-	*
		4.00000	28.00000	71.60000	1.1327	0.14287	0.15511	-	-	-	*
		6.00000	28.00000	71.60000	1.5892	0.22028	0.73385	-	-	-	*
		8.00000	28.00000	71.60000	2.0364	0.31330	1.4468	-	-	-	*
		10.00000	28.00000	71.60000	2.5452	0.43992	2.2572	-	-	-	*
		12.00000	28.00000	71.60000	3.6370	0.71715	3.1513	-	-	-	*
		14.00000	28.00000	71.60000	4.7052	1.0799	4.0940	-	-	-	*
		16.00000	28.00000	71.60000	5.7573	1.5804	5.0294	-	-	-	*
		18.00000	28.00000	71.60000	6.7641	2.3097	5.8811	-	-	-	*
		20.00000	28.00000	71.60000	7.6011	3.4328	6.5530	-	-	-	*
		22.00000	28.00000	71.60000	7.8623	5.2415	6.9318	-	-	-	*
		24.00000	28.00000	71.60000	6.5797	8.3742	7.1724	-	-	-	*
		26.00000	28.00000	71.60000	0.89090	12.473	7.8226	-	-	-	*
		28.00000	28.00000	71.60000	0.093119	15.737	9.4308	-	-	-	*
		30.00000	28.00000	71.60000	0.093199	15.751	9.4294	-	-	-	*
		32.00000	28.00000	71.60000	0.093279	15.764	9.4279	-	-	-	*
		34.00000	28.00000	71.60000	0.093358	15.778	9.4264	-	-	-	*
		36.00000	28.00000	71.60000	0.093438	15.791	9.4249	-	-	-	*
		38.00000	28.00000	71.60000	0.093518	15.805	9.4234	-	-	-	*
		40.00000	28.00000	71.60000	0.093598	15.818	9.4218	-	-	-	*
		42.00000	28.00000	71.60000	0.093678	15.832	9.4202	-	-	-	*
		44.00000	28.00000	71.60000	-3.8019	11.406	7.5991	-	-	-	*
		46.00000	28.00000	71.60000	-7.4587	6.9443	7.0562	-	-	-	*
		48.00000	28.00000	71.60000	-8.1107	4.4692	6.9384	-	-	-	*
		50.00000	28.00000	71.60000	-7.5223	2.9435	6.4383	-	-	-	*
		52.00000	28.00000	71.60000	-6.5691	1.9929	5.6798	-	-	-	*
		54.00000	28.00000	71.60000	-5.5156	1.3662	4.7742	-	-	-	*
		56.00000	28.00000	71.60000	-4.4379	0.92886	3.8132	-	-	-	*
		58.00000	28.00000	71.60000	-3.3467	0.60645	2.8679	-	-	-	*
		60.00000	28.00000	71.60000	-2.3883	0.38157	1.9882	-	-	-	*
		62.00000	28.00000	71.60000	-1.9356	0.27651	1.2023	-	-	-	*
		64.00000	28.00000	71.60000	-1.4718	0.19014	0.51683	-	-	-	*
		66.00000	28.00000	71.60000	-1.0000	0.11790	0.13128	-	-	-	*
		68.00000	28.00000	71.60000	-0.52231	0.056636	0.076395	-	-	-	*
		70.00000	28.00000	71.60000	-0.040109	0.0040258	0.011927	-	-	-	*
		0.00000	30.00000	71.60000	0.24111	0.0073622	0.044402	-	-	-	*
		2.00000	30.00000	71.60000	0.72840	0.024079	0.096843	-	-	-	*
		4.00000	30.00000	71.60000	1.2146	0.043768	0.16752	-	-	-	*
		6.00000	30.00000	71.60000	1.6992	0.067296	0.80370	-	-	-	*
		8.00000	30.00000	71.60000	2.1819	0.095908	1.5428	-	-	-	*
		10.00000	30.00000	71.60000	2.8147	0.13900	2.3899	-	-	-	*
		12.00000	30.00000	71.60000	3.9898	0.22478	3.3324	-	-	-	*
		14.00000	30.00000	71.60000	5.1821	0.33981	4.3361	-	-	-	*
		16.00000	30.00000	71.60000	6.4275	0.50412	5.3457	-	-	-	*
		18.00000	30.00000	71.60000	7.7559	0.75667	6.2839	-	-	-	*
		20.00000	30.00000	71.60000	9.1793	1.1844	7.0511	-	-	-	*
		22.00000	30.00000	71.60000	10.641	2.0268	7.5220	-	-	-	*
		24.00000	30.00000	71.60000	11.629	4.2288	7.5290	-	-	-	*
		26.00000	30.00000	71.60000	3.4598	13.839	7.4404	-	-	-	*
		28.00000	30.00000	71.60000	0.10738	18.148	8.7492	-	-	-	*
		30.00000	30.00000	71.60000	0.10747	18.163	8.7422	-	-	-	*
		32.00000	30.00000	71.60000	0.10756	18.178	8.7353	-	-	-	*
		34.00000	30.00000	71.60000	0.10765	18.193	8.7282	-	-	-	*
		36.00000	30.00000	71.60000	0.10774	18.208	8.7212	-	-	-	*
		38.00000	30.00000	71.60000	0.10783	18.223	8.7141	-	-	-	*
		40.00000	30.00000	71.60000	0.10792	18.238	8.7070	-	-	-	*
		42.00000	30.00000	71.60000	0.10801	18.254	8.6998	-	-	-	*
		44.00000	30.00000	71.60000	-10.355	8.0537	7.2143	-	-	-	*
		46.00000	30.00000	71.60000	-11.753	2.8368	7.6963	-	-	-	*
		48.00000	30.00000	71.60000	-10.342	1.4775	7.5011	-	-	-	*
		50.00000	30.00000	71.60000	-8.8339	0.89620	6.9017	-	-	-	*
		52.00000	30.00000	71.60000	-7.4164	0.58331	6.0486	-	-	-	*
		54.00000	30.00000	71.60000	-6.0996	0.39172	5.0597	-	-	-	*
		56.00000	30.00000	71.60000	-4.8596	0.26370	4.0289	-	-	-	*
		58.00000	30.00000	71.60000	-3.6622	0.17205	3.0272	-	-	-	*
		60.00000	30.00000	71.60000	-2.5620	0.10612	2.1036	-	-	-	*
		62.00000	30.00000	71.60000	-2.0675	0.076575	1.2852	-	-	-	*
		64.00000	30.00000	71.60000	-1.5709	0.052613	0.57722	-	-	-	*
		66.00000	30.00000	71.60000	-1.0726	0.032787	0.14074	-	-	-	*
		68.00000	30.00000	71.60000	-0.57319	0.016114	0.081808	-	-	-	*
		70.00000	30.00000	71.60000	-0.072860	0.0018960	0.018162	-	-	-	*
		0.00000	32.00000	71.60000	0.36709	-0.0085371	0.067747	-	-	-	*
		2.00000	32.00000	71.60000	1.1167	-0.025970	0.14851	-	-	-	*
		4.00000	32.00000	71.60000	1.8663	-0.043402	0.25713	-	-	-	*
		6.00000	32.00000	71.60000	2.6159	-0.060834	0.96727	-	-	-	*
		8.00000	32.00000	71.60000	3.3655	-0.078267	1.8370	-	-	-	*
		10.00000	32.00000	71.60000	4.2667	-0.099227	2.8755	-	-	-	*
		12.00000	32.00000	71.60000	5.7173	-0.13296	4.0653	-	-	-	*
		14.00000	32.00000	71.60000	7.1925	-0.16727	5.3566	-	-	-	*
		16.00000	32.00000	71.60000	8.7335	-0.20310	6.6672	-	-	-	*
		18.00000	32.00000	71.60000	10.382	-0.24144	7.8828	-	-	-	*
		20.00000	32.00000	71.60000	12.178	-0.28322	8.8566	-	-	-	*
		22.00000	32.00000	71.60000	14.165	-0.32941	9.4099	-	-	-	*
		24.00000	32.00000	71.60000	16.382	-0.38098	9.3314	-	-	-	*
		26.00000	32.00000	71.60000	18.872	-0.43888	8.3776	-	-	-	*
		28.00000	32.00000	71.60000	Point lies within an excavation.						*
		30.00000	32.00000	71.60000	Point lies within an excavation.						*
		32.00000	32.00000	71.60000	Point lies within an excavation.						*
		34.00000	32.00000	71.60000	Point lies within an excavation.						*
		36.00000	32.00000	71.60000	Point lies within an excavation.						*
		38.00000	32.00000	71.60000	Point lies within an excavation.						*
		40.00000	32.00000	71.60000	Point lies within an excavation.						*
		42.00000	32.00000	71.60000	Point lies within an excavation.						*
		44.00000	32.00000	71.60000	-18.025	0.21206	8.8037	-	-	-	*
		46.00000	32.00000	71.60000	-15.628	0.18386	9.4412	-	-	-	*
		48.00000	32.00000	71.60000	-13.491	0.15871	9.2867	-	-	-	*
		50.00000	32.00000	71.60000	-11.570	0.13612	8.5732	-	-	-	*
		52.00000	32.00000	71.60000	-9.8266	0.11561	7.5013	-	-	-	*
		54.00000	32.00000	71.60000	-8.2176	0.096677	6.2396	-	-	-	*
		56.00000	32.00000	71.60000	-6.7022	0.078850	4.9241	-	-	-	*
		58.00000	32.00000	71.60000	-5.2391	0.061637	3.6585	-	-	-	*
		60.00000	32.00000	71.60000	-3.8684	0.045511	2.5145	-	-	-	*
		62.00000	32.00000	71.60000	-3.1185	0.036688	1.5311	-	-	-	*
		64.00000	32.00000	71.60000	-2.3686	0.027866	0.71535	-	-	-	*
		66.00000	32.00000	71.60000	-1.6187	0.019044	0.21259	-	-	-	*
		68.00000	32.00000	71.60000	-0.86882	0.010221	0.12352	-	-	-	*
		70.00000	32.00000	71.60000	-0.11892	0.0013991	0.028971	-	-	-	*
		0.00000	34.00000	71.60000	0.34966	-0.0081317	0.065369	-	-	-	*
		2.00000	34.00000	71.60000	1.0993	-0.025564	0.14669	-	-	-	*
		4.00000	34.00000	71.60000	1.8489	-0.042997	0.25364	-	-	-	*
		6.00000	34.00000	71.60000	2.5984	-0.060429	0.94900	-	-	-	*
		8.00000	34.00000	71.60000	3.3480	-0.077861	1.8148	-	-	-	*
		10.00000	34.00000	71.60000	4.2330	-0.098441	2.8495	-	-	-	*
		12.00000	34.00000	71.60000	5.6835	-0.13217	4.0363	-	-	-	*
		14.00000	34.00000	71.60000	7.1576	-0.16646	5.3260	-	-	-	*
		16.00000	34.00000	71.60000	8.6966	-0.20225	6.6373	-	-	-	*
		18.00000	34.00000	71.60000	10.342	-0.24051	7.8566	-	-	-	*
		20.00000	34.00000	71.60000	12.135	-0.28220	8.8380	-	-	-	*
		22.00000	34.00000	71.60000	14.116	-0.32828	9.4033	-	-	-	*
		24.00000	34.00000	71.60000	16.328	-0.37971	9.3421	-	-	-	*
		26.00000	34.00000	71.60000	18.811	-0.43746	8.4117	-	-	-	*
		28.00000	34.00000	71.60000	Point lies within an excavation.						*
		30.00000	34.00000	71.60000	Point lies within an excavation.						*
		32.00000	34.00000	71.60000	Point lies within an excavation.						*
		34.00000	34.00000	71.60000	Point lies within an excavation.						*
		36.00000	34.00000	71.60000	Point lies within an excavation.						*
		38.00000	34.00000	71.60000	Point lies within an excavation.						*
		40.00000	34.00000	71.60000	Point lies within an excavation.						*
		42.00000	34.00000	71.60000	Point lies within an excavation.						*
		44.00000	34.00000	71.60000	-18.055	0.21241	8.7905	-	-	-	*
		46.00000	34.00000	71.60000	-15.655	0.18418	9.4388	-	-	-	*
		48.00000	34.00000	71.60000	-13.514	0.15899	9.2922	-	-	-	*
		50.00000	34.00000	71.60000	-11.592	0.13638	8.5840	-	-	-	*
		52.00000	34.00000	71.60000	-9.8462	0.11584	7.5153	-	-	-	*
		54.00000	34.00000	71.60000	-8.2359	0.096893	6.2550	-	-	-	*
		56.00000	34.00000	71.60000	-6.7197	0.079055	4.9394	-	-	-	*
		58.00000	34.00000	71.60000	-5.2562	0.061838	3.6728	-	-	-	*
		60.00000	34.00000	71.60000	-3.8772	0.045614	2.5270	-	-	-	*

Type/No.		Coordinates			Displacements				Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		62.00000	34.00000	71.60000	-3.1273	0.036792	1.5417	-	-	-	*
		64.00000	34.00000	71.60000	-2.3774	0.027970	0.72404	-	-	-	*
		66.00000	34.00000	71.60000	-1.6275	0.019148	0.21399	-	-	-	*
		68.00000	34.00000	71.60000	-0.87764	0.010325	0.12439	-	-	-	*
		70.00000	34.00000	71.60000	-0.12775	0.0015029	0.030555	-	-	-	*
		0.00000	36.00000	71.60000	0.33223	-0.0077263	0.062945	-	-	-	*
		2.00000	36.00000	71.60000	1.0818	-0.025159	0.14488	-	-	-	*
		4.00000	36.00000	71.60000	1.8314	-0.042591	0.25020	-	-	-	*
		6.00000	36.00000	71.60000	2.5810	-0.060024	0.93081	-	-	-	*
		8.00000	36.00000	71.60000	3.3306	-0.077456	1.7928	-	-	-	*
		10.00000	36.00000	71.60000	4.1992	-0.097656	2.8236	-	-	-	*
		12.00000	36.00000	71.60000	5.6496	-0.13139	4.0073	-	-	-	*
		14.00000	36.00000	71.60000	7.1227	-0.16564	5.2954	-	-	-	*
		16.00000	36.00000	71.60000	8.6598	-0.20139	6.6073	-	-	-	*
		18.00000	36.00000	71.60000	10.302	-0.23958	7.8303	-	-	-	*
		20.00000	36.00000	71.60000	12.091	-0.28118	8.8192	-	-	-	*
		22.00000	36.00000	71.60000	14.068	-0.32715	9.3964	-	-	-	*
		24.00000	36.00000	71.60000	16.273	-0.37845	9.3524	-	-	-	*
		26.00000	36.00000	71.60000	18.750	-0.43604	8.4452	-	-	-	*
		28.00000	36.00000	71.60000	Point lies within an excavation.						*
		30.00000	36.00000	71.60000	Point lies within an excavation.						*
		32.00000	36.00000	71.60000	Point lies within an excavation.						*
		34.00000	36.00000	71.60000	Point lies within an excavation.						*
		36.00000	36.00000	71.60000	Point lies within an excavation.						*
		38.00000	36.00000	71.60000	Point lies within an excavation.						*
		40.00000	36.00000	71.60000	Point lies within an excavation.						*
		42.00000	36.00000	71.60000	Point lies within an excavation.						*
		44.00000	36.00000	71.60000	-18.085	0.21276	8.7771	-	-	-	*
		46.00000	36.00000	71.60000	-15.682	0.18449	9.4363	-	-	-	*
		48.00000	36.00000	71.60000	-13.538	0.15927	9.2976	-	-	-	*
		50.00000	36.00000	71.60000	-11.613	0.13663	8.5948	-	-	-	*
		52.00000	36.00000	71.60000	-9.8659	0.11607	7.5293	-	-	-	*
		54.00000	36.00000	71.60000	-8.2542	0.097108	6.2704	-	-	-	*
		56.00000	36.00000	71.60000	-6.7371	0.079260	4.9548	-	-	-	*
		58.00000	36.00000	71.60000	-5.2733	0.062039	3.6871	-	-	-	*
		60.00000	36.00000	71.60000	-3.8861	0.045718	2.5396	-	-	-	*
		62.00000	36.00000	71.60000	-3.1362	0.036896	1.5523	-	-	-	*
		64.00000	36.00000	71.60000	-2.3863	0.028074	0.73275	-	-	-	*
		66.00000	36.00000	71.60000	-1.6364	0.019251	0.21541	-	-	-	*
		68.00000	36.00000	71.60000	-0.88647	0.010429	0.12526	-	-	-	*
		70.00000	36.00000	71.60000	-0.13657	0.0016067	0.032122	-	-	-	*
		0.00000	38.00000	71.60000	0.31480	-0.0073209	0.060474	-	-	-	*
		2.00000	38.00000	71.60000	1.0644	-0.024753	0.14308	-	-	-	*
		4.00000	38.00000	71.60000	1.8140	-0.042186	0.24682	-	-	-	*
		6.00000	38.00000	71.60000	2.5636	-0.059618	0.91271	-	-	-	*
		8.00000	38.00000	71.60000	3.3132	-0.077051	1.7708	-	-	-	*
		10.00000	38.00000	71.60000	4.1654	-0.096870	2.7978	-	-	-	*
		12.00000	38.00000	71.60000	5.6158	-0.13060	3.9783	-	-	-	*
		14.00000	38.00000	71.60000	7.0879	-0.16483	5.2648	-	-	-	*
		16.00000	38.00000	71.60000	8.6230	-0.20053	6.5773	-	-	-	*
		18.00000	38.00000	71.60000	10.262	-0.23866	7.8039	-	-	-	*
		20.00000	38.00000	71.60000	12.047	-0.28017	8.8001	-	-	-	*
		22.00000	38.00000	71.60000	14.019	-0.32603	9.3892	-	-	-	*
		24.00000	38.00000	71.60000	16.219	-0.37719	9.3623	-	-	-	*
		26.00000	38.00000	71.60000	18.689	-0.43462	8.4781	-	-	-	*
		28.00000	38.00000	71.60000	Point lies within an excavation.						*
		30.00000	38.00000	71.60000	Point lies within an excavation.						*
		32.00000	38.00000	71.60000	Point lies within an excavation.						*
		34.00000	38.00000	71.60000	Point lies within an excavation.						*
		36.00000	38.00000	71.60000	Point lies within an excavation.						*
		38.00000	38.00000	71.60000	Point lies within an excavation.						*
		40.00000	38.00000	71.60000	Point lies within an excavation.						*
		42.00000	38.00000	71.60000	Point lies within an excavation.						*
		44.00000	38.00000	71.60000	-18.115	0.21312	8.7636	-	-	-	*
		46.00000	38.00000	71.60000	-15.708	0.18480	9.4336	-	-	-	*
		48.00000	38.00000	71.60000	-13.562	0.15956	9.3029	-	-	-	*
		50.00000	38.00000	71.60000	-11.635	0.13688	8.6055	-	-	-	*
		52.00000	38.00000	71.60000	-9.8856	0.11630	7.5433	-	-	-	*
		54.00000	38.00000	71.60000	-8.2725	0.097324	6.2858	-	-	-	*
		56.00000	38.00000	71.60000	-6.7546	0.079465	4.9702	-	-	-	*
		58.00000	38.00000	71.60000	-5.2903	0.062239	3.7014	-	-	-	*
		60.00000	38.00000	71.60000	-3.8949	0.045822	2.5522	-	-	-	*
		62.00000	38.00000	71.60000	-3.1450	0.037000	1.5629	-	-	-	*
		64.00000	38.00000	71.60000	-2.3951	0.028177	0.74148	-	-	-	*
		66.00000	38.00000	71.60000	-1.6452	0.019355	0.21684	-	-	-	*
		68.00000	38.00000	71.60000	-0.89529	0.010533	0.12613	-	-	-	*
		70.00000	38.00000	71.60000	-0.14539	0.0017105	0.033672	-	-	-	*
		0.00000	40.00000	71.60000	0.29736	-0.0069155	0.057954	-	-	-	*
		2.00000	40.00000	71.60000	0.70363	-0.017302	0.094967	-	-	-	*
		4.00000	40.00000	71.60000	1.2065	-0.032316	0.16353	-	-	-	*
		6.00000	40.00000	71.60000	1.7082	-0.050242	0.74758	-	-	-	*
		8.00000	40.00000	71.60000	2.2086	-0.072018	1.4845	-	-	-	*
		10.00000	40.00000	71.60000	2.7926	-0.10217	2.3337	-	-	-	*
		12.00000	40.00000	71.60000	3.9881	-0.16617	3.2843	-	-	-	*
		14.00000	40.00000	71.60000	5.1994	-0.25158	4.3040	-	-	-	*
		16.00000	40.00000	71.60000	6.4643	-0.37294	5.3379	-	-	-	*
		18.00000	40.00000	71.60000	7.8170	-0.55836	6.3092	-	-	-	*
		20.00000	40.00000	71.60000	9.2813	-0.87012	7.1180	-	-	-	*
		22.00000	40.00000	71.60000	10.842	-1.4784	7.6394	-	-	-	*
		24.00000	40.00000	71.60000	12.240	-3.0599	7.7111	-	-	-	*
		26.00000	40.00000	71.60000	7.5953	-11.393	7.1812	-	-	-	*
		28.00000	40.00000	71.60000	-0.21863	-18.365	8.6456	-	-	-	*
		30.00000	40.00000	71.60000	-0.21827	-18.334	8.6606	-	-	-	*
		32.00000	40.00000	71.60000	-0.21790	-18.304	8.6754	-	-	-	*
		34.00000	40.00000	71.60000	-0.21754	-18.273	8.6900	-	-	-	*
		36.00000	40.00000	71.60000	-0.21717	-18.243	8.7045	-	-	-	*
		38.00000	40.00000	71.60000	-0.21681	-18.212	8.7188	-	-	-	*
		40.00000	40.00000	71.60000	-0.21645	-18.182	8.7330	-	-	-	*
		42.00000	40.00000	71.60000	-0.21609	-18.151	8.7470	-	-	-	*
		44.00000	40.00000	71.60000	-9.0884	-9.0884	7.1101	-	-	-	*
		46.00000	40.00000	71.60000	-11.559	-3.3025	7.6286	-	-	-	*
		48.00000	40.00000	71.60000	-10.284	-1.7140	7.4653	-	-	-	*
		50.00000	40.00000	71.60000	-8.8132	-1.0369	6.8897	-	-	-	*
		52.00000	40.00000	71.60000	-7.4117	-0.67379	6.0547	-	-	-	*
		54.00000	40.00000	71.60000	-6.1042	-0.45216	5.0788	-	-	-	*
		56.00000	40.00000	71.60000	-4.8715	-0.30447	4.0563	-	-	-	*
		58.00000	40.00000	71.60000	-3.6814	-0.19899	3.0589	-	-	-	*
		60.00000	40.00000	71.60000	-2.5554	-0.12169	2.1363	-	-	-	*
		62.00000	40.00000	71.60000	-2.0675	-0.087979	1.3166	-	-	-	*
		64.00000	40.00000	71.60000	-1.5770	-0.060655	0.60608	-	-	-	*
		66.00000	40.00000	71.60000	-1.0847	-0.038059	0.14303	-	-	-	*
		68.00000	40.00000	71.60000	-0.59095	-0.019063	0.083299	-	-	-	*
		70.00000	40.00000	71.60000	-0.096152	-0.0028702	0.022272	-	-	-	*
		0.00000	42.00000	71.60000	0.16463	-0.016213	0.033572	-	-	-	*
		2.00000	42.00000	71.60000	0.64958	-0.069218	0.089231	-	-	-	*
		4.00000	42.00000	71.60000	1.1299	-0.13115	0.15244	-	-	-	*
		6.00000	42.00000	71.60000	1.6042	-0.20446	0.68555	-	-	-	*
		8.00000	42.00000	71.60000	2.0703	-0.29254	1.3985	-	-	-	*
		10.00000	42.00000	71.60000	2.5419	-0.40299	2.2133	-	-	-	*
		12.00000	42.00000	71.60000	3.6599	-0.66082	3.1182	-	-	-	*
		14.00000	42.00000	71.60000	4.7568	-0.99740	4.0791	-	-	-	*
		16.00000	42.00000	71.60000	5.8448	-1.4612	5.0408	-	-	-	*
		18.00000	42.00000	71.60000	6.9050	-2.1373	5.9262	-	-	-	*
		20.00000	42.00000	71.60000	7.8373	-3.1839	6.6376	-	-	-	*
		22.00000	42.00000	71.60000	8.2951	-4.9016	7.0580	-	-	-	*
		24.00000	42.00000	71.60000	7.1508	-7.7467	7.1062	-	-	-	*
		26.00000	42.00000	71.60000	1.9117	-12.426	7.7686	-	-	-	*
		28.00000	42.00000	71.60000	-0.18965	-15.931	9.4076	-	-	-	*
		30.00000	42.00000	71.60000	-0.18933	-15.904	9.4112	-	-	-	*
		32.00000	42.00000	71.60000	-0.18901	-15.876	9.4147	-	-	-	*
		34.00000	42.00000	71.60000	-0.18868	-15.849	9.4180	-	-	-	*
		36.00000	42.00000	71.60000	-0.18836	-15.822	9.4213	-	-	-	*
		38.00000	42.00000	71.60000	-0.18803	-15.795	9.4244	-	-	-	*
		40.00000	42.00000	71.60000	-0.18771	-15.768	9.4274	-	-	-	*
		42.00000	42.00000	71.60000	-0.18739	-15.741	9.4303	-	-	-	*
		44.00000	42.00000	71.60000	-3.3153	-11.604	7.6523	-	-	-	*
		46.00000	42.00000	71.60000	-7.1528	-7.1528	7.0132	-	-	-	*
		48.00000	42.00000	71.60000	-7.9443	-4.6341	6.8922	-	-	-	*
		50.00000	42.00000	71.60000	-7.4376	-3.0626	6.4136	-	-	-	*
		52.00000	42.00000	71.60000	-6.5249	-2.0761	5.6735	-	-	-	*
		54.00000	42.00000	71.60000	-5.4942	-1.4244	4.7821	-	-	-	*

Type/No.		Coordinates			Displacements				Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		56.00000	42.00000	71.60000	-4.4317	-0.96943	3.8310	-	-	-	*
		58.00000	42.00000	71.60000	-3.3526	-0.63428	2.8917	-	-	-	*
		60.00000	42.00000	71.60000	-2.3761	-0.39602	2.0146	-	-	-	*
		62.00000	42.00000	71.60000	-1.9310	-0.28760	1.2288	-	-	-	*
		64.00000	42.00000	71.60000	-1.4742	-0.19845	0.54188	-	-	-	*
		66.00000	42.00000	71.60000	-1.0090	-0.12391	0.13297	-	-	-	*
		68.00000	42.00000	71.60000	-0.53742	-0.060676	0.077661	-	-	-	*
		70.00000	42.00000	71.60000	-0.061130	-0.0063867	0.015893	-	-	-	*
		0.00000	44.00000	71.60000	0.095116	-0.016573	0.022159	-	-	-	*
		2.00000	44.00000	71.60000	0.55645	-0.10490	0.079947	-	-	-	*
		4.00000	44.00000	71.60000	1.0083	-0.20707	0.13528	-	-	-	*
		6.00000	44.00000	71.60000	1.4478	-0.32646	0.56285	-	-	-	*
		8.00000	44.00000	71.60000	1.8703	-0.46758	1.2365	-	-	-	*
		10.00000	44.00000	71.60000	2.2695	-0.63657	1.9987	-	-	-	*
		12.00000	44.00000	71.60000	3.1487	-1.0058	2.8373	-	-	-	*
		14.00000	44.00000	71.60000	4.0846	-1.5152	3.7198	-	-	-	*
		16.00000	44.00000	71.60000	4.9308	-2.1809	4.5934	-	-	-	*
		18.00000	44.00000	71.60000	5.6204	-3.0779	5.3874	-	-	-	*
		20.00000	44.00000	71.60000	5.9828	-4.3002	6.0169	-	-	-	*
		22.00000	44.00000	71.60000	5.6545	-5.9115	6.4017	-	-	-	*
		24.00000	44.00000	71.60000	4.4415	-8.5129	7.0566	-	-	-	*
		26.00000	44.00000	71.60000	0.93632	-10.768	7.6175	-	-	-	*
		28.00000	44.00000	71.60000	-0.16382	-13.761	9.3441	-	-	-	*
		30.00000	44.00000	71.60000	-0.16353	-13.737	9.3394	-	-	-	*
		32.00000	44.00000	71.60000	-0.16324	-13.712	9.3346	-	-	-	*
		34.00000	44.00000	71.60000	-0.16295	-13.688	9.3297	-	-	-	*
		36.00000	44.00000	71.60000	-0.16266	-13.664	9.3247	-	-	-	*
		38.00000	44.00000	71.60000	-0.16237	-13.639	9.3196	-	-	-	*
		40.00000	44.00000	71.60000	-0.16209	-13.615	9.3145	-	-	-	*
		42.00000	44.00000	71.60000	-0.16180	-13.591	9.3093	-	-	-	*
		44.00000	44.00000	71.60000	-1.7210	-10.326	7.4907	-	-	-	*
		46.00000	44.00000	71.60000	-4.6551	-7.9802	6.9175	-	-	-	*
		48.00000	44.00000	71.60000	-5.5521	-5.5521	6.2474	-	-	-	*
		50.00000	44.00000	71.60000	-5.7230	-4.0398	5.7985	-	-	-	*
		52.00000	44.00000	71.60000	-5.3185	-2.9010	5.1429	-	-	-	*
		54.00000	44.00000	71.60000	-4.6244	-2.0553	4.3430	-	-	-	*
		56.00000	44.00000	71.60000	-3.7848	-1.4193	3.4791	-	-	-	*
		58.00000	44.00000	71.60000	-2.8557	-0.92616	2.6171	-	-	-	*
		60.00000	44.00000	71.60000	-2.1299	-0.60855	1.8046	-	-	-	*
		62.00000	44.00000	71.60000	-1.7377	-0.44366	1.0699	-	-	-	*
		64.00000	44.00000	71.60000	-1.3226	-0.30522	0.42042	-	-	-	*
		66.00000	44.00000	71.60000	-0.89103	-0.18758	0.11802	-	-	-	*
		68.00000	44.00000	71.60000	-0.44713	-0.086542	0.068475	-	-	-	*
		70.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	46.00000	71.60000	0.43178	-0.11679	0.067438	-	-	-	*
		4.00000	46.00000	71.60000	0.85179	-0.25097	0.11503	-	-	-	*
		6.00000	46.00000	71.60000	1.2527	-0.40530	0.38808	-	-	-	*
		8.00000	46.00000	71.60000	1.6284	-0.58409	1.0121	-	-	-	*
		10.00000	46.00000	71.60000	1.9696	-0.79265	1.7089	-	-	-	*
		12.00000	46.00000	71.60000	2.5231	-1.1564	2.4682	-	-	-	*
		14.00000	46.00000	71.60000	3.2967	-1.7547	3.2604	-	-	-	*
		16.00000	46.00000	71.60000	3.9188	-2.4869	4.0385	-	-	-	*
		18.00000	46.00000	71.60000	4.3123	-3.3883	4.7413	-	-	-	*
		20.00000	46.00000	71.60000	4.3314	-4.4667	5.2998	-	-	-	*
		22.00000	46.00000	71.60000	4.0674	-6.1011	5.9963	-	-	-	*
		24.00000	46.00000	71.60000	2.8623	-7.8714	6.5959	-	-	-	*
		26.00000	46.00000	71.60000	0.55480	-9.1541	7.0481	-	-	-	*
		28.00000	46.00000	71.60000	-0.14065	-11.814	8.6926	-	-	-	*
		30.00000	46.00000	71.60000	-0.14039	-11.792	8.6822	-	-	-	*
		32.00000	46.00000	71.60000	-0.14013	-11.771	8.6717	-	-	-	*
		34.00000	46.00000	71.60000	-0.13986	-11.749	8.6611	-	-	-	*
		36.00000	46.00000	71.60000	-0.13960	-11.727	8.6505	-	-	-	*
		38.00000	46.00000	71.60000	-0.13934	-11.705	8.6399	-	-	-	*
		40.00000	46.00000	71.60000	-0.13908	-11.683	8.6292	-	-	-	*
		42.00000	46.00000	71.60000	-0.13882	-11.661	8.6184	-	-	-	*
		44.00000	46.00000	71.60000	-1.0414	-8.8521	6.9141	-	-	-	*
		46.00000	46.00000	71.60000	-3.0771	-7.4729	6.4374	-	-	-	*
		48.00000	46.00000	71.60000	-4.0607	-5.7527	5.8208	-	-	-	*
		50.00000	46.00000	71.60000	-4.2035	-4.2035	5.1098	-	-	-	*
		52.00000	46.00000	71.60000	-4.0915	-3.1617	4.5100	-	-	-	*
		54.00000	46.00000	71.60000	-3.6675	-2.3092	3.8026	-	-	-	*
		56.00000	46.00000	71.60000	-3.0330	-1.6113	3.0336	-	-	-	*
		58.00000	46.00000	71.60000	-2.2528	-1.0351	2.2601	-	-	-	*
		60.00000	46.00000	71.60000	-1.8432	-0.74605	1.5246	-	-	-	*
		62.00000	46.00000	71.60000	-1.5057	-0.54461	0.85238	-	-	-	*
		64.00000	46.00000	71.60000	-1.1353	-0.37116	0.24957	-	-	-	*
		66.00000	46.00000	71.60000	-0.74053	-0.22086	0.10055	-	-	-	*
		68.00000	46.00000	71.60000	-0.32728	-0.089739	0.055538	-	-	-	*
		70.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	48.00000	71.60000	0.28389	-0.10006	0.050946	-	-	-	*
		4.00000	48.00000	71.60000	0.67122	-0.25770	0.094307	-	-	-	*
		6.00000	48.00000	71.60000	1.0337	-0.43579	0.17111	-	-	-	*
		8.00000	48.00000	71.60000	1.3640	-0.63752	0.74063	-	-	-	*
		10.00000	48.00000	71.60000	1.6518	-0.86618	1.3659	-	-	-	*
		12.00000	48.00000	71.60000	1.8830	-1.1246	2.0395	-	-	-	*
		14.00000	48.00000	71.60000	2.4887	-1.7260	2.7366	-	-	-	*
		16.00000	48.00000	71.60000	2.9479	-2.4377	3.4176	-	-	-	*
		18.00000	48.00000	71.60000	3.1646	-3.2399	4.0318	-	-	-	*
		20.00000	48.00000	71.60000	3.2534	-4.3718	4.7172	-	-	-	*
		22.00000	48.00000	71.60000	2.8895	-5.6477	5.3429	-	-	-	*
		24.00000	48.00000	71.60000	1.9150	-6.8619	5.8573	-	-	-	*
		26.00000	48.00000	71.60000	0.35710	-7.6776	6.2119	-	-	-	*
		28.00000	48.00000	71.60000	-0.11964	-10.050	7.6580	-	-	-	*
		30.00000	48.00000	71.60000	-0.11940	-10.029	7.6441	-	-	-	*
		32.00000	48.00000	71.60000	-0.11916	-10.009	7.6302	-	-	-	*
		34.00000	48.00000	71.60000	-0.11892	-9.9893	7.6162	-	-	-	*
		36.00000	48.00000	71.60000	-0.11868	-9.9693	7.6022	-	-	-	*
		38.00000	48.00000	71.60000	-0.11844	-9.9493	7.5882	-	-	-	*
		40.00000	48.00000	71.60000	-0.11821	-9.9293	7.5742	-	-	-	*
		42.00000	48.00000	71.60000	-0.11797	-9.9094	7.5601	-	-	-	*
		44.00000	48.00000	71.60000	-0.67698	-7.4468	6.0762	-	-	-	*
		46.00000	48.00000	71.60000	-2.0866	-6.5577	5.6943	-	-	-	*
		48.00000	48.00000	71.60000	-2.9168	-5.3475	5.1621	-	-	-	*
		50.00000	48.00000	71.60000	-3.1805	-4.1160	4.5270	-	-	-	*
		52.00000	48.00000	71.60000	-3.0244	-3.0244	3.8323	-	-	-	*
		54.00000	48.00000	71.60000	-2.7455	-2.2371	3.2010	-	-	-	*
		56.00000	48.00000	71.60000	-2.2608	-1.5543	2.5284	-	-	-	*
		58.00000	48.00000	71.60000	-1.7739	-1.0548	1.8478	-	-	-	*
		60.00000	48.00000	71.60000	-1.5402	-0.80677	1.1948	-	-	-	*
		62.00000	48.00000	71.60000	-1.2531	-0.58658	0.59047	-	-	-	*
		64.00000	48.00000	71.60000	-0.92580	-0.39168	0.13438	-	-	-	*
		66.00000	48.00000	71.60000	-0.56766	-0.21910	0.082334	-	-	-	*
		68.00000	48.00000	71.60000	-0.18568	-0.065887	0.037332	-	-	-	*
		70.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	50.00000	71.60000	0.12088	-0.052514	0.027522	-	-	-	*
		4.00000	50.00000	71.60000	0.47692	-0.22568	0.074045	-	-	-	*
		6.00000	50.00000	71.60000	0.80378	-0.41765	0.11840	-	-	-	*
		8.00000	50.00000	71.60000	1.0938	-0.63010	0.43684	-	-	-	*
		10.00000	50.00000	71.60000	1.3368	-0.86403	0.99042	-	-	-	*
		12.00000	50.00000	71.60000	1.5200	-1.1189	1.5783	-	-	-	*
		14.00000	50.00000	71.60000	1.7185	-1.4690	2.1815	-	-	-	*
		16.00000	50.00000	71.60000	2.0822	-2.1223	2.7681	-	-	-	*
		18.00000	50.00000	71.60000	2.3557	-2.9726	3.3968	-	-	-	*
		20.00000	50.00000	71.60000	2.3715	-3.9277	3.9998	-	-	-	*
		22.00000	50.00000	71.60000	2.0365	-4.9060	4.5336	-	-	-	*
		24.00000	50.00000	71.60000	1.3057	-5.7670	4.9569	-	-	-	*
		26.00000	50.00000	71.60000	0.23865	-6.3242	5.2283	-	-	-	*
		28.00000	50.00000	71.60000	-0.10030	-8.4250	6.4129	-	-	-	*
		30.00000	50.00000	71.60000	-0.10008	-8.4063	6.3975	-	-	-	*
		32.00000	50.00000	71.60000	-0.099854	-8.3877	6.3820	-	-	-	*
		34.00000	50.00000	71.60000	-0.099632	-8.3691	6.3664	-	-	-	*
		36.00000	50.00000	71.60000	-0.099410	-8.3504	6.3509	-	-	-	*
		38.00000	50.00000	71.60000	-0.099189	-8.3318	6.3354	-	-	-	*
		40.00000	50.00000	71.60000	-0.098967	-8.3133	6.3199	-	-	-	*
		42.00000	50.00000	71.60000	-0.098746	-8.2947	6.3043	-	-	-	*
		44.00000	50.00000	71.60000	-0.45449	-6.1356	5.0964	-	-	-	*
		46.00000	50.00000	71.60000	-1.4321	-5.5240	4.7990	-	-	-	*
		48.00000	50.00000	71.60000	-2.0673	-4.6514	4.3585	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		50.00000	50.00000	71.60000	-2.3240	-3.6910	3.8162	-	-	-	*
		52.00000	50.00000	71.60000	-2.2532	-2.7653	3.2122	-	-	-	*
		54.00000	50.00000	71.60000	-1.9320	-1.9320	2.5824	-	-	-	*
		56.00000	50.00000	71.60000	-1.5452	-1.3037	1.9946	-	-	-	*
		58.00000	50.00000	71.60000	-1.4282	-1.0422	1.4053	-	-	-	*
		60.00000	50.00000	71.60000	-1.2399	-0.79709	0.83443	-	-	-	*
		62.00000	50.00000	71.60000	-0.99525	-0.57174	0.29736	-	-	-	*
		64.00000	50.00000	71.60000	-0.70616	-0.36666	0.10302	-	-	-	*
		66.00000	50.00000	71.60000	-0.38199	-0.18094	0.063220	-	-	-	*
		68.00000	50.00000	71.60000	-0.029921	-0.013030	0.0099733	-	-	-	*
		70.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	52.00000	71.60000	0.27763	-0.15617	0.051970	-	-	-	*
		6.00000	52.00000	71.60000	0.57335	-0.35413	0.088320	-	-	-	*
		8.00000	52.00000	71.60000	0.82988	-0.56828	0.13754	-	-	-	*
		10.00000	52.00000	71.60000	1.0383	-0.79769	0.59975	-	-	-	*
		12.00000	52.00000	71.60000	1.1878	-1.0393	1.1074	-	-	-	*
		14.00000	52.00000	71.60000	1.2665	-1.2869	1.6224	-	-	-	*
		16.00000	52.00000	71.60000	1.4205	-1.7210	2.1662	-	-	-	*
		18.00000	52.00000	71.60000	1.6546	-2.4819	2.7070	-	-	-	*
		20.00000	52.00000	71.60000	1.6616	-3.2714	3.2133	-	-	-	*
		22.00000	52.00000	71.60000	1.4071	-4.0294	3.6527	-	-	-	*
		24.00000	52.00000	71.60000	0.88800	-4.6620	3.9903	-	-	-	*
		26.00000	52.00000	71.60000	0.16069	-5.0617	4.1931	-	-	-	*
		28.00000	52.00000	71.60000	-0.082138	-6.8996	5.0979	-	-	-	*
		30.00000	52.00000	71.60000	-0.081927	-6.8819	5.0823	-	-	-	*
		32.00000	52.00000	71.60000	-0.081716	-6.8641	5.0667	-	-	-	*
		34.00000	52.00000	71.60000	-0.081505	-6.8464	5.0511	-	-	-	*
		36.00000	52.00000	71.60000	-0.081294	-6.8287	5.0355	-	-	-	*
		38.00000	52.00000	71.60000	-0.081084	-6.8110	5.0199	-	-	-	*
		40.00000	52.00000	71.60000	-0.080873	-6.7933	5.0043	-	-	-	*
		42.00000	52.00000	71.60000	-0.080662	-6.7756	4.9887	-	-	-	*
		44.00000	52.00000	71.60000	-0.30619	-4.8991	4.0697	-	-	-	*
		46.00000	52.00000	71.60000	-0.97522	-4.4581	3.8438	-	-	-	*
		48.00000	52.00000	71.60000	-1.4284	-3.8091	3.4908	-	-	-	*
		50.00000	52.00000	71.60000	-1.6227	-3.0545	3.0437	-	-	-	*
		52.00000	52.00000	71.60000	-1.5670	-2.2792	2.5367	-	-	-	*
		54.00000	52.00000	71.60000	-1.3167	-1.5605	2.0009	-	-	-	*
		56.00000	52.00000	71.60000	-1.2125	-1.2125	1.4621	-	-	-	*
		58.00000	52.00000	71.60000	-1.1109	-0.96078	0.95359	-	-	-	*
		60.00000	52.00000	71.60000	-0.95486	-0.72751	0.45886	-	-	-	*
		62.00000	52.00000	71.60000	-0.74328	-0.50606	0.11897	-	-	-	*
		64.00000	52.00000	71.60000	-0.48610	-0.29914	0.077118	-	-	-	*
		66.00000	52.00000	71.60000	-0.19165	-0.10760	0.039764	-	-	-	*
		68.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	54.00000	71.60000	0.080177	-0.052258	0.021243	-	-	-	*
		6.00000	54.00000	71.60000	0.34998	-0.25048	0.062958	-	-	-	*
		8.00000	54.00000	71.60000	0.58025	-0.46041	0.095904	-	-	-	*
		10.00000	54.00000	71.60000	0.76355	-0.67975	0.20535	-	-	-	*
		12.00000	54.00000	71.60000	0.89173	-0.90412	0.64271	-	-	-	*
		14.00000	54.00000	71.60000	1.0105	-1.1897	1.0972	-	-	-	*
		16.00000	54.00000	71.60000	1.0812	-1.5179	1.5575	-	-	-	*
		18.00000	54.00000	71.60000	1.0783	-1.8743	2.0053	-	-	-	*
		20.00000	54.00000	71.60000	1.0845	-2.4740	2.4182	-	-	-	*
		22.00000	54.00000	71.60000	0.92657	-3.0745	2.7696	-	-	-	*
		24.00000	54.00000	71.60000	0.58447	-3.5555	3.0318	-	-	-	*
		26.00000	54.00000	71.60000	0.10555	-3.8525	3.1799	-	-	-	*
		28.00000	54.00000	71.60000	-0.064666	-5.4320	3.8209	-	-	-	*
		30.00000	54.00000	71.60000	-0.064460	-5.4147	3.8062	-	-	-	*
		32.00000	54.00000	71.60000	-0.064254	-5.3974	3.7916	-	-	-	*
		34.00000	54.00000	71.60000	-0.064049	-5.3801	3.7770	-	-	-	*
		36.00000	54.00000	71.60000	-0.063843	-5.3628	3.7624	-	-	-	*
		38.00000	54.00000	71.60000	-0.063637	-5.3455	3.7479	-	-	-	*
		40.00000	54.00000	71.60000	-0.063431	-5.3282	3.7333	-	-	-	*
		42.00000	54.00000	71.60000	-0.063226	-5.3110	3.7188	-	-	-	*
		44.00000	54.00000	71.60000	-0.20028	-3.7051	3.0684	-	-	-	*
		46.00000	54.00000	71.60000	-0.63862	-3.3755	2.9008	-	-	-	*
		48.00000	54.00000	71.60000	-0.93306	-2.8769	2.6253	-	-	-	*
		50.00000	54.00000	71.60000	-1.0438	-2.2719	2.2671	-	-	-	*
		52.00000	54.00000	71.60000	-1.0646	-1.7904	1.8534	-	-	-	*
		54.00000	54.00000	71.60000	-1.0522	-1.4420	1.4095	-	-	-	*
		56.00000	54.00000	71.60000	-0.97037	-1.1220	0.95654	-	-	-	*
		58.00000	54.00000	71.60000	-0.83558	-0.83558	0.50871	-	-	-	*
		60.00000	54.00000	71.60000	-0.69194	-0.60957	0.12514	-	-	-	*
		62.00000	54.00000	71.60000	-0.50457	-0.39722	0.083968	-	-	-	*
		64.00000	54.00000	71.60000	-0.27261	-0.19397	0.052754	-	-	-	*
		66.00000	54.00000	71.60000	-0.0030143	-0.0019566	0.0039189	-	-	-	*
		68.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	56.00000	71.60000	0.13854	-0.11274	0.033702	-	-	-	*
		8.00000	56.00000	71.60000	0.34919	-0.31503	0.066000	-	-	-	*
		10.00000	56.00000	71.60000	0.51554	-0.52183	0.095035	-	-	-	*
		12.00000	56.00000	71.60000	0.66135	-0.76239	0.19867	-	-	-	*
		14.00000	56.00000	71.60000	0.77211	-1.0336	0.58558	-	-	-	*
		16.00000	56.00000	71.60000	0.83142	-1.3271	0.96668	-	-	-	*
		18.00000	56.00000	71.60000	0.82726	-1.6348	1.3304	-	-	-	*
		20.00000	56.00000	71.60000	0.74907	-1.9429	1.6599	-	-	-	*
		22.00000	56.00000	71.60000	0.59124	-2.2306	1.9348	-	-	-	*
		24.00000	56.00000	71.60000	0.35738	-2.4719	2.1342	-	-	-	*
		26.00000	56.00000	71.60000	0.064028	-2.6572	2.2402	-	-	-	*
		28.00000	56.00000	71.60000	-0.047390	-3.9808	2.6577	-	-	-	*
		30.00000	56.00000	71.60000	-0.047184	-3.9634	2.6448	-	-	-	*
		32.00000	56.00000	71.60000	-0.047026	-3.9502	2.6318	-	-	-	*
		34.00000	56.00000	71.60000	-0.046919	-3.9412	2.6189	-	-	-	*
		36.00000	56.00000	71.60000	-0.046813	-3.9323	2.6060	-	-	-	*
		38.00000	56.00000	71.60000	-0.046707	-3.9234	2.5932	-	-	-	*
		40.00000	56.00000	71.60000	-0.046601	-3.9145	2.5803	-	-	-	*
		42.00000	56.00000	71.60000	-0.046494	-3.9055	2.5675	-	-	-	*
		44.00000	56.00000	71.60000	-0.12264	-2.5753	2.1425	-	-	-	*
		46.00000	56.00000	71.60000	-0.39923	-2.3954	2.0205	-	-	-	*
		48.00000	56.00000	71.60000	-0.61369	-2.1479	1.8099	-	-	-	*
		50.00000	56.00000	71.60000	-0.75259	-1.8593	1.5290	-	-	-	*
		52.00000	56.00000	71.60000	-0.81411	-1.5542	1.1983	-	-	-	*
		54.00000	56.00000	71.60000	-0.80460	-1.2516	0.83705	-	-	-	*
		56.00000	56.00000	71.60000	-0.73459	-0.96415	0.46070	-	-	-	*
		58.00000	56.00000	71.60000	-0.61568	-0.69888	0.12640	-	-	-	*
		60.00000	56.00000	71.60000	-0.45862	-0.45862	0.084313	-	-	-	*
		62.00000	56.00000	71.60000	-0.28320	-0.25307	0.056661	-	-	-	*
		64.00000	56.00000	71.60000	-0.070257	-0.056746	0.020038	-	-	-	*
		66.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	58.00000	71.60000	0.13841	-0.13991	0.035755	-	-	-	*
		10.00000	58.00000	71.60000	0.30589	-0.34692	0.065038	-	-	-	*
		12.00000	58.00000	71.60000	0.44505	-0.57486	0.094141	-	-	-	*
		14.00000	58.00000	71.60000	0.54684	-0.82026	0.13418	-	-	-	*
		16.00000	58.00000	71.60000	0.60305	-1.0785	0.41194	-	-	-	*
		18.00000	58.00000	71.60000	0.60584	-1.3415	0.70601	-	-	-	*
		20.00000	58.00000	71.60000	0.54946	-1.5969	0.96639	-	-	-	*
		22.00000	58.00000	71.60000	0.43249	-1.8283	1.1789	-	-	-	*
		24.00000	58.00000	71.60000	0.26022	-2.0167	1.3289	-	-	-	*
		26.00000	58.00000	71.60000	0.046098	-2.1436	1.4039	-	-	-	*
		28.00000	58.00000	71.60000	-0.038311	-3.2181	1.6519	-	-	-	*
		30.00000	58.00000	71.60000	-0.038205	-3.2092	1.6410	-	-	-	*
		32.00000	58.00000	71.60000	-0.038098	-3.2003	1.6300	-	-	-	*
		34.00000	58.00000	71.60000	-0.037992	-3.1913	1.6191	-	-	-	*
		36.00000	58.00000	71.60000	-0.037886	-3.1824	1.6083	-	-	-	*
		38.00000	58.00000	71.60000	-0.037780	-3.1735	1.5974	-	-	-	*
		40.00000	58.00000	71.60000	-0.037673	-3.1646	1.5866	-	-	-	*
		42.00000	58.00000	71.60000	-0.037567	-3.1556	1.5758	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		44.00000	58.00000	71.60000	-0.088664	-2.0836	1.3203	-	-	-	*
		46.00000	58.00000	71.60000	-0.28992	-1.9466	1.2322	-	-	-	*
		48.00000	58.00000	71.60000	-0.44737	-1.7522	1.0729	-	-	-	*
		50.00000	58.00000	71.60000	-0.54932	-1.5187	0.85497	-	-	-	*
		52.00000	58.00000	71.60000	-0.59182	-1.2644	0.59253	-	-	-	*
		54.00000	58.00000	71.60000	-0.57702	-1.0044	0.29891	-	-	-	*
		56.00000	58.00000	71.60000	-0.51088	-0.75036	0.12010	-	-	-	*
		58.00000	58.00000	71.60000	-0.40111	-0.50951	0.084791	-	-	-	*
		60.00000	58.00000	71.60000	-0.25561	-0.28604	0.057231	-	-	-	*
		62.00000	58.00000	71.60000	-0.081668	-0.081668	0.023968	-	-	-	*
		64.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	60.00000	71.60000	0.10641	-0.13367	0.032525	-	-	-	*
		12.00000	60.00000	71.60000	0.23869	-0.34146	0.061389	-	-	-	*
		14.00000	60.00000	71.60000	0.33722	-0.56022	0.085988	-	-	-	*
		16.00000	60.00000	71.60000	0.39627	-0.78492	0.11456	-	-	-	*
		18.00000	60.00000	71.60000	0.41099	-1.0079	0.14958	-	-	-	*
		20.00000	60.00000	71.60000	0.37863	-1.2187	0.34621	-	-	-	*
		22.00000	60.00000	71.60000	0.30001	-1.4046	0.51181	-	-	-	*
		24.00000	60.00000	71.60000	0.18075	-1.5515	0.62541	-	-	-	*
		26.00000	60.00000	71.60000	0.031963	-1.6461	0.67913	-	-	-	*
		28.00000	60.00000	71.60000	-0.029384	-2.4682	0.81465	-	-	-	*
		30.00000	60.00000	71.60000	-0.029277	-2.4593	0.80565	-	-	-	*
		32.00000	60.00000	71.60000	-0.029171	-2.4504	0.79666	-	-	-	*
		34.00000	60.00000	71.60000	-0.029065	-2.4414	0.78770	-	-	-	*
		36.00000	60.00000	71.60000	-0.028959	-2.4325	0.77876	-	-	-	*
		38.00000	60.00000	71.60000	-0.028852	-2.4236	0.76984	-	-	-	*
		40.00000	60.00000	71.60000	-0.028746	-2.4147	0.76094	-	-	-	*
		42.00000	60.00000	71.60000	-0.028640	-2.4057	0.75206	-	-	-	*
		44.00000	60.00000	71.60000	-0.061126	-1.5893	0.60810	-	-	-	*
		46.00000	60.00000	71.60000	-0.20005	-1.4861	0.54379	-	-	-	*
		48.00000	60.00000	71.60000	-0.30775	-1.3336	0.42214	-	-	-	*
		50.00000	60.00000	71.60000	-0.37433	-1.1450	0.25103	-	-	-	*
		52.00000	60.00000	71.60000	-0.39514	-0.93396	0.13556	-	-	-	*
		54.00000	60.00000	71.60000	-0.36999	-0.71258	0.10395	-	-	-	*
		56.00000	60.00000	71.60000	-0.30193	-0.49064	0.077839	-	-	-	*
		58.00000	60.00000	71.60000	-0.19584	-0.27523	0.053260	-	-	-	*
		60.00000	60.00000	71.60000	-0.057305	-0.070949	0.020236	-	-	-	*
		62.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
Line 1	Line 1	30.00000	4.70000	71.00000	0.0024917	0.42110	0.074831	0.42110	-0.0024917	90.000	*
	0.94000	30.00000	5.64000	71.00000	0.0045774	0.77358	0.11404	0.77358	-0.0045774	90.000	*
	1.8800	30.00000	6.58000	71.00000	0.0066631	1.1261	0.14947	1.1261	-0.0066631	90.000	*
	2.8200	30.00000	7.52000	71.00000	0.0087489	1.4786	0.19177	1.4786	-0.0087489	90.000	*
	3.7600	30.00000	8.46000	71.00000	0.010835	1.8310	0.25003	1.8310	-0.010835	90.000	*
	4.7000	30.00000	9.40000	71.00000	0.012920	2.1835	0.53748	2.1835	-0.012920	90.000	*
	5.6400	30.00000	10.34000	71.00000	0.015006	2.5360	0.88360	2.5360	-0.015006	90.000	*
	6.5800	30.00000	11.28000	71.00000	0.017092	2.8885	1.2635	2.8885	-0.017092	90.000	*
	7.5200	30.00000	12.22000	71.00000	0.019177	3.2410	1.6799	3.2410	-0.019177	90.000	*
	8.4600	30.00000	13.16000	71.00000	0.021263	3.5935	2.1340	3.5935	-0.021263	90.000	*
	9.4000	30.00000	14.10000	71.00000	0.023349	3.9460	2.6255	3.9460	-0.023349	90.000	*
Line 2	Line 2	32.00000	15.10000	71.00000	0.027649	4.6727	3.1940	0.027649	4.6727	0.0	*
	1.0286	33.02857	15.10000	71.00000	0.027675	4.6772	3.1975	0.027675	4.6772	0.0	*
	2.0571	34.05714	15.10000	71.00000	0.027702	4.6816	3.2010	0.027702	4.6816	0.0	*
	3.0857	35.08571	15.10000	71.00000	0.027728	4.6860	3.2046	0.027728	4.6860	0.0	*
	4.1143	36.11429	15.10000	71.00000	0.027754	4.6904	3.2081	0.027754	4.6904	0.0	*
	5.1429	37.14286	15.10000	71.00000	0.027780	4.6948	3.2117	0.027780	4.6948	0.0	*
	6.1714	38.17143	15.10000	71.00000	0.027806	4.6992	3.2152	0.027806	4.6992	0.0	*
	7.2000	39.20000	15.10000	71.00000	0.027832	4.7036	3.2187	0.027832	4.7036	0.0	*
Line 3	Line 3	39.40000	14.20000	71.00000	0.023971	4.0511	2.7103	0.023971	4.0511	0.0	*
	0.85000	40.25000	14.20000	71.00000	0.023993	4.0548	2.7131	0.023993	4.0548	0.0	*
	1.7000	41.10000	14.20000	71.00000	0.024014	4.0584	2.7158	0.024014	4.0584	0.0	*
	2.5500	41.95000	14.20000	71.00000	0.024036	4.0621	2.7186	0.024036	4.0621	0.0	*
	3.4000	42.80000	14.20000	71.00000	0.024058	4.0657	2.7214	0.024058	4.0657	0.0	*
	4.2500	43.65000	14.20000	71.00000	-0.090220	2.7066	2.2806	-0.090220	2.7066	0.0	*
	5.1000	44.50000	14.20000	71.00000	-0.22266	2.6242	2.2439	-0.22266	2.6242	0.0	*
Line 4	Line 4	44.60000	14.20000	71.00000	-0.23749	2.6124	2.2384	-2.6124	-0.23749	270.00	*
	0.99000	44.60000	13.21000	71.00000	-0.20135	2.3477	1.8157	-2.3477	-0.20135	270.00	*
	1.9800	44.60000	12.22000	71.00000	-0.17140	2.1116	1.4189	-2.1116	-0.17140	270.00	*
	2.9700	44.60000	11.23000	71.00000	-0.14438	1.8741	1.0486	-1.8741	-0.14438	270.00	*
	3.9600	44.60000	10.24000	71.00000	-0.11990	1.6354	0.70415	-1.6354	-0.11990	270.00	*
	4.9500	44.60000	9.25000	71.00000	-0.097603	1.3957	0.38349	-1.3957	-0.097603	270.00	*
	5.9400	44.60000	8.26000	71.00000	-0.077218	1.1552	0.15585	-1.1552	-0.077218	270.00	*
	6.9300	44.60000	7.27000	71.00000	-0.058508	0.91390	0.11857	-0.91390	-0.058508	270.00	*
	7.9200	44.60000	6.28000	71.00000	-0.041276	0.67198	0.091322	-0.67198	-0.041276	270.00	*
	8.9100	44.60000	5.29000	71.00000	-0.025353	0.42949	0.066909	-0.42949	-0.025353	270.00	*
	9.9000	44.60000	4.30000	71.00000	-0.010596	0.18650	0.036817	-0.18650	-0.010596	270.00	*
Line 5	Line 5	29.00000	57.20000	71.60000	-0.041829	-3.5136	2.0280	3.5136	-0.041829	270.00	*
	1.0167	29.00000	56.18333	71.60000	-0.046367	-3.8948	2.5522	3.8948	-0.046367	270.00	*
	2.0333	29.00000	55.16667	71.60000	-0.054494	-4.5775	3.1181	4.5775	-0.054494	270.00	*
	3.0500	29.00000	54.15000	71.60000	-0.063267	-5.3144	3.7217	5.3144	-0.063267	270.00	*
	4.0667	29.00000	53.13333	71.60000	-0.072081	-6.0548	4.3564	6.0548	-0.072081	270.00	*
	5.0833	29.00000	52.11667	71.60000	-0.080999	-6.8039	5.0137	6.8039	-0.080999	270.00	*
	6.1000	29.00000	51.10000	71.60000	-0.090088	-7.5674	5.6828	7.5674	-0.090088	270.00	*
Line 6	Line 6	30.70000	51.10000	71.60000	-0.089905	-7.5520	5.6694	7.5525	-0.0078173	269.38	*
	1.0223	30.68889	50.07778	71.60000	-0.099275	-8.3391	6.3414	8.3397	-0.0086321	269.38	*
	2.0446	30.67778	49.05556	71.60000	-0.10895	-9.1515	6.9974	9.1521	-0.0094730	269.38	*
	3.0668	30.66667	48.03333	71.60000	-0.11898	-9.9947	7.6199	9.9954	-0.010346	269.38	*
	4.0891	30.65556	47.01111	71.60000	-0.12946	-10.874	8.1893	10.875	-0.011256	269.38	*
	5.1114	30.64444	45.98889	71.60000	-0.14042	-11.796	8.6837	11.797	-0.012210	269.38	*
	6.1337	30.63333	44.96667	71.60000	-0.15196	-12.764	9.0790	12.765	-0.013213	269.38	*
	7.1560	30.62222	43.94444	71.60000	-0.16412	-13.786	9.3489	13.787	-0.014271	269.38	*
	8.1783	30.61111	42.92222	71.60000	-0.17698	-14.866	9.4650	14.867	-0.015389	269.38	*
	9.2005	30.60000	41.90000	71.60000	-0.19060	-16.010	9.3965	16.012	-0.016573	269.38	*
Line 7	Line 7	30.65000	41.90000	71.60000	-0.19059	-16.010	9.3966	-0.034398	-16.011	359.44	*
	1.0250	31.67500	41.89000	71.60000	-0.19056	-16.007	9.3970	-0.034392	-16.008	359.44	*
	2.0501	32.70000	41.88000	71.60000	-0.19053	-16.005	9.3973	-0.034387	-16.006	359.44	*
	3.0751	33.72500	41.87000	71.60000	-0.19050	-16.002	9.3977	-0.034382	-16.003	359.44	*
	4.1002	34.75000	41.86000	71.60000	-0.19047	-16.000	9.3981	-0.034376	-16.001	359.44	*
	5.1252	35.77500	41.85000	71.60000	-0.19044	-15.997	9.3984	-0.034371	-15.998	359.44	*
	6.1503	36.80000	41.84000	71.60000	-0.19041	-15.994	9.3988	-0.034365	-15.996	359.44	*
	7.1753	37.82500	41.83000	71.60000	-0.19038	-15.992	9.3991	-0.034360	-15.993	359.44	*
	8.2004	38.85000	41.82000	71.60000	-0.19035	-15.989	9.3995	-0.034354	-15.991	359.44	*
	9.2254	39.87500	41.81000	71.60000	-0.19032	-15.987	9.3999	-0.034349	-15.988	359.44	*
	10.250	40.90000	41.80000	71.60000	-0.19029	-15.984	9.4002	-0.034343	-15.985	359.44	*
Line 8	Line 8	41.00000	41.80000	71.60000	-0.19027	-15.983	9.4004	-15.984	-0.017296	89.256	*
	0.96258	41.01250	42.76250	71.60000	-0.17744	-14.905	9.4659	-14.906	-0.016130	89.256	*
	1.9252	41.02500	43.72500	71.60000	-0.16529	-13.885	9.3667	-13.886	-0.015025	89.256	*
	2.8877	41.03750	44.68750	71.60000	-0.15376	-12.916	9.1287	-12.917	-0.013977	89.256	*
	3.8503	41.05000	45.65000	71.60000	-0.14280	-11.995	8.7759	-11.996	-0.012981	89.256	*
	4.8129	41.06250	46.61250	71.60000	-0.13235	-11.118	8.3305	-11.118	-0.012031	89.256	*
	5.7755	41.07500	47.57500	71.60000	-0.12236	-10.278	7.8131	-10.279	-0.011123	89.256	*
	6.7381	41.08750	48.53750	71.60000	-0.11277	-9.4726	7.2424	-9.4733	-0.010251	89.256	*
	7.7006	41.10000	49.50000	71.60000	-0.10353	-8.6963	6.6356	-8.6969	-0.0094107	89.256	*
	8.6632	41.11250	50.46250	71.60000	-0.094578	-7.9445	6.0080	-7.9451	-0.0085973	89.256	*
	9.6258	41.12500	51.42500	71.60000	-0.085867	-7.2128	5.3732	-7.2133	-0.0078054	89.256	*
	10.588	41.13750	52.38750	71.60000	-0.077339	-6.4965	4.7431	-6.4969	-0.0070302	89.256	*
	11.551	41.15000	53.35000	71.60000	-0.068940	-5.7909	4.1277	-5.7913	-0.0062667	89.256	*
	12.514	41.16250	54.31250	71.60000	-0.060614	-5.0916	3.5356	-5.0919	-0.0055099	89.256	*
	13.476	41.17500	55.27500	71.60000	-0.052307	-4.3938	2.9734	-4.3941	-0.0047547	89.256	*
	14.439	41.18750	56.23750	71.60000	-0.045477	-3.8201	2.4461	-3.8204	-0.0041340	89.256	*
	15.401	41.20000	57.20000	71.60000	-0.041180	-3.4592	1.9567	-3.4594	-0.0037434	89.256	*
Line 9	Line 9	58.70000	19.40000	77.00000	-1.2971	0.93955	1.0731	0.90599	1.3207	88.531	*
	0.97532	58.72500	20.37500	77.00000	-1.4508	0.95872	1.2694	0.92121	1.4749	88.531	*
	1.9506	58.75000	21.35000	77.00000	-1.6090	0.96126	1.4611	0.91970	1.6331	88.531	*
	2.9260	58.77500	22.32500	77.00000	-1.7698	0.94560	1.6459	0.89993	1.7935	88.531	*
	3.9013	58.80000	23.30000	77.00000	-1.9314	0.91034	1.8215	0.86053	1.9541	88.531	*
	4.8766	58.82500	24.27500	77.00000	-2.0911	0.85440	1.9852	0.80052	2.1123	88.531	*
	5.8519	58.85000	25.25000	77.00000	-2.2460	0.77719	2.1343	0.71936	2.2652	88.531	*
	6.8272	58.87500	26.22500	77.00000	-2.4798	0.70345	2.2660	0.63965	2.4970	88.531	*
	7.8026	58.90000	27.20000	77.00000	-2.6894	0.59576	2.3777	0.52663	2.7038	88.531	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
	8.7779	58.92500	28.17500	77.00000	-2.8651	0.45715	2.4670	0.38356	2.8759	88.531 *
	9.7532	58.95000	29.15000	77.00000	-3.0014	0.29351	2.5316	0.21648	3.0079	88.531 *
	10.729	58.97500	30.12500	77.00000	-3.0939	0.11206	2.5698	0.032721	3.0957	88.531 *
	11.704	59.00000	31.10000	77.00000	-4.5066	0.053019	3.0620	-0.062515	4.5065	88.531 *
	12.679	59.02500	32.07500	77.00000	-4.4968	0.052904	3.0543	-0.062379	4.4967	88.531 *
	13.654	59.05000	33.05000	77.00000	-4.4870	0.052788	3.0466	-0.062243	4.4869	88.531 *
	14.630	59.07500	34.02500	77.00000	-4.4772	0.052673	3.0388	-0.062106	4.4771	88.531 *
	15.605	59.10000	35.00000	77.00000	-4.4674	0.052557	3.0311	-0.061970	4.4672	88.531 *
Line 10	Line 10	59.15000	35.00000	77.00000	-4.4311	0.052131	3.0026	-4.4311	0.052131	0.0 *
	0.96667	60.11667	35.00000	77.00000	-3.8379	0.045152	2.4712	-3.8379	0.045152	0.0 *
	1.9333	61.08333	35.00000	77.00000	-3.4754	0.040888	1.9779	-3.4754	0.040888	0.0 *
	2.9000	62.05000	35.00000	77.00000	-3.1130	0.036623	1.5245	-3.1130	0.036623	0.0 *
	3.8667	63.01667	35.00000	77.00000	-2.7505	0.032359	1.1107	-2.7505	0.032359	0.0 *
	4.8333	63.98333	35.00000	77.00000	-2.3881	0.028095	0.73457	-2.3881	0.028095	0.0 *
	5.8000	64.95000	35.00000	77.00000	-2.0256	0.023831	0.39239	-2.0256	0.023831	0.0 *
Line 11	Line 11	65.00000	35.00000	77.00000	-2.0069	0.023611	0.37552	-0.0037401	-2.0070	269.43 *
	1.0100	64.99000	33.99000	77.00000	-2.0062	0.023602	0.37488	-0.0037388	-2.0063	269.43 *
	2.0201	64.98000	32.98000	77.00000	-2.0055	0.023594	0.37425	-0.0037375	-2.0056	269.43 *
	3.0301	64.97000	31.97000	77.00000	-2.0048	0.023586	0.37362	-0.0037362	-2.0049	269.43 *
	4.0402	64.96000	30.96000	77.00000	-2.0041	0.023577	0.37298	-0.0037348	-2.0042	269.43 *
	5.0502	64.95000	29.95000	77.00000	-1.3329	0.045750	0.27499	-0.032552	-1.3332	269.43 *
	6.0603	64.94000	28.94000	77.00000	-1.2977	0.10457	0.25746	-0.091721	-1.2986	269.43 *
	7.0703	64.93000	27.93000	77.00000	-1.2493	0.15853	0.22603	-0.14615	-1.2509	269.43 *
	8.0804	64.92000	26.92000	77.00000	-1.1891	0.20600	0.18122	-0.19422	-1.1911	269.43 *
	9.0904	64.91000	25.91000	77.00000	-1.1184	0.24563	0.15619	-0.23455	-1.1208	269.43 *
	10.100	64.90000	24.90000	77.00000	-1.0387	0.27635	0.14395	-0.26605	-1.0414	269.43 *
Line 12	Line 12	64.95000	24.90000	77.00000	-1.0282	0.27294	0.14199	-1.0221	-0.29497	329.04 *
	0.58310	65.45000	24.60000	77.00000	-0.89879	0.24531	0.12107	-0.89692	-0.25207	329.04 *
	1.1662	65.95000	24.30000	77.00000	-0.77033	0.21576	0.10391	-0.77156	-0.21132	329.04 *
Line 13	Line 13	66.00000	24.30000	77.00000	-0.75992	0.21238	0.10262	-0.16909	-0.77071	266.76 *
	1.0617	65.94000	23.24000	77.00000	-0.68471	0.22364	0.094638	-0.18459	-0.69625	266.76 *
	2.1234	65.88000	22.18000	77.00000	-0.60296	0.22551	0.086235	-0.19108	-0.61474	266.76 *
	3.1851	65.82000	21.12000	77.00000	-0.51613	0.21763	0.077476	-0.18811	-0.52760	266.76 *
	4.2468	65.76000	20.06000	77.00000	-0.42558	0.19983	0.068246	-0.17546	-0.43620	266.76 *
	5.3085	65.70000	19.00000	77.00000	-0.33260	0.17219	0.058190	-0.15312	-0.34180	266.76 *
Line 14	Line 14	58.75000	19.40000	77.00000	-1.2927	0.93336	1.0592	-1.3445	0.85698	356.68 *
	0.98737	59.73571	19.34286	77.00000	-1.1893	0.81191	0.77791	-1.2343	0.74172	356.68 *
	1.9747	60.72143	19.28571	77.00000	-1.0728	0.69493	0.50614	-1.1113	0.63168	356.68 *
	2.9621	61.70714	19.22857	77.00000	-0.94483	0.58250	0.24402	-0.97696	0.52684	356.68 *
	3.9495	62.69286	19.17143	77.00000	-0.80656	0.47458	0.12390	-0.83267	0.42711	356.68 *
	4.9368	63.67857	19.11429	77.00000	-0.65914	0.37110	0.098041	-0.67951	0.33233	356.68 *
	5.9242	64.66429	19.05714	77.00000	-0.50358	0.27189	0.077929	-0.51847	0.24229	356.68 *
	6.9116	65.65000	19.00000	77.00000	-0.34076	0.17680	0.059169	-0.35042	0.15678	356.68 *

* Result includes imported displacement(s).

Specific Building Damage Results - Horizontal Displacements

Structure: 24 Netherhall Gardens | Sub-structure: Front

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.00000	4.70000	71.00000	0.0024917	0.42110	0.42110	-0.0024917 d
0.94000	30.00000	5.64000	71.00000	0.0045774	0.77358	0.77358	-0.0045774 d
1.8800	30.00000	6.58000	71.00000	0.0066631	1.1261	1.1261	-0.0066631 d
2.8200	30.00000	7.52000	71.00000	0.0087489	1.4786	1.4786	-0.0087489 d
3.7600	30.00000	8.46000	71.00000	0.010835	1.8310	1.8310	-0.010835 d
4.7000	30.00000	9.40000	71.00000	0.012920	2.1835	2.1835	-0.012920 d
5.6400	30.00000	10.34000	71.00000	0.015006	2.5360	2.5360	-0.015006 d
6.5800	30.00000	11.28000	71.00000	0.017092	2.8885	2.8885	-0.017092 d
7.5200	30.00000	12.22000	71.00000	0.019177	3.2410	3.2410	-0.019177 d
8.4600	30.00000	13.16000	71.00000	0.021263	3.5935	3.5935	-0.021263 d
9.4000	30.00000	14.10000	71.00000	0.023349	3.9460	3.9460	-0.023349 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	32.00000	15.10000	71.00000	0.027649	4.6727	0.027649	4.6727 d
1.0286	33.02857	15.10000	71.00000	0.027675	4.6772	0.027675	4.6772 d
2.0571	34.05714	15.10000	71.00000	0.027702	4.6816	0.027702	4.6816 d
3.0857	35.08571	15.10000	71.00000	0.027728	4.6860	0.027728	4.6860 d
4.1143	36.11429	15.10000	71.00000	0.027754	4.6904	0.027754	4.6904 d
5.1429	37.14286	15.10000	71.00000	0.027780	4.6948	0.027780	4.6948 d
6.1714	38.17143	15.10000	71.00000	0.027806	4.6992	0.027806	4.6992 d
7.2000	39.20000	15.10000	71.00000	0.027832	4.7036	0.027832	4.7036 d

d - Displacements include imported displacements.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.40000	14.20000	71.00000	0.023971	4.0511	0.023971	4.0511 d
0.85000	40.25000	14.20000	71.00000	0.023993	4.0548	0.023993	4.0548 d
1.7000	41.10000	14.20000	71.00000	0.024014	4.0584	0.024014	4.0584 d
2.5500	41.95000	14.20000	71.00000	0.024036	4.0621	0.024036	4.0621 d
3.4000	42.80000	14.20000	71.00000	0.024058	4.0657	0.024058	4.0657 d
4.2500	43.65000	14.20000	71.00000	-0.090220	2.7066	-0.090220	2.7066 d
5.1000	44.50000	14.20000	71.00000	-0.22266	2.6242	-0.22266	2.6242 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.60000	14.20000	71.00000	-0.23749	2.6124	-2.6124	-0.23749 d
0.99000	44.60000	13.21000	71.00000	-0.20135	2.3477	-2.3477	-0.20135 d
1.9800	44.60000	12.22000	71.00000	-0.17140	2.1116	-2.1116	-0.17140 d
2.9700	44.60000	11.23000	71.00000	-0.14438	1.8741	-1.8741	-0.14438 d
3.9600	44.60000	10.24000	71.00000	-0.11990	1.6354	-1.6354	-0.11990 d
4.9500	44.60000	9.25000	71.00000	-0.097603	1.3957	-1.3957	-0.097603 d
5.9400	44.60000	8.26000	71.00000	-0.077218	1.1552	-1.1552	-0.077218 d
6.9300	44.60000	7.27000	71.00000	-0.058508	0.91390	-0.91390	-0.058508 d
7.9200	44.60000	6.28000	71.00000	-0.041276	0.67198	-0.67198	-0.041276 d
8.9100	44.60000	5.29000	71.00000	-0.025353	0.42949	-0.42949	-0.025353 d
9.9000	44.60000	4.30000	71.00000	-0.010596	0.18650	-0.18650	-0.010596 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	29.00000	57.20000	71.60000	-0.041829	-3.5136	3.5136	-0.041829 d

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
1.0167	29.00000	56.18333	71.60000	-0.046367	-3.8948	3.8948	-0.046367 d
2.0333	29.00000	55.16667	71.60000	-0.054494	-4.5775	4.5775	-0.054494 d
3.0500	29.00000	54.15000	71.60000	-0.063267	-5.3144	5.3144	-0.063267 d
4.0667	29.00000	53.13333	71.60000	-0.072081	-6.0548	6.0548	-0.072081 d
5.0833	29.00000	52.11667	71.60000	-0.080999	-6.8039	6.8039	-0.080999 d
6.1000	29.00000	51.10000	71.60000	-0.090088	-7.5674	7.5674	-0.090088 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.70000	51.10000	71.60000	-0.089905	-7.5520	7.5525	-0.0078173 d
1.0223	30.68889	50.07778	71.60000	-0.099275	-8.3391	8.3397	-0.0086321 d
2.0446	30.67778	49.05556	71.60000	-0.10895	-9.1515	9.1521	-0.0094730 d
3.0668	30.66667	48.03333	71.60000	-0.11898	-9.9947	9.9954	-0.010346 d
4.0891	30.65556	47.01111	71.60000	-0.12946	-10.874	10.875	-0.011256 d
5.1114	30.64444	45.98889	71.60000	-0.14042	-11.796	11.797	-0.012210 d
6.1337	30.63333	44.96667	71.60000	-0.15196	-12.764	12.765	-0.013213 d
7.1560	30.62222	43.94444	71.60000	-0.16412	-13.786	13.787	-0.014271 d
8.1783	30.61111	42.92222	71.60000	-0.17698	-14.866	14.867	-0.015389 d
9.2005	30.60000	41.90000	71.60000	-0.19060	-16.010	16.012	-0.016573 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.65000	41.90000	71.60000	-0.19059	-16.010	-0.034398	-16.011 d
1.0250	31.67500	41.89000	71.60000	-0.19056	-16.007	-0.034392	-16.008 d
2.0501	32.70000	41.88000	71.60000	-0.19053	-16.005	-0.034387	-16.006 d
3.0751	33.72500	41.87000	71.60000	-0.19050	-16.002	-0.034382	-16.003 d
4.1002	34.75000	41.86000	71.60000	-0.19047	-16.000	-0.034376	-16.001 d
5.1252	35.77500	41.85000	71.60000	-0.19044	-15.997	-0.034371	-15.998 d
6.1503	36.80000	41.84000	71.60000	-0.19041	-15.994	-0.034365	-15.996 d
7.1753	37.82500	41.83000	71.60000	-0.19038	-15.992	-0.034360	-15.993 d
8.2004	38.85000	41.82000	71.60000	-0.19035	-15.989	-0.034354	-15.991 d
9.2254	39.87500	41.81000	71.60000	-0.19032	-15.987	-0.034349	-15.988 d
10.250	40.90000	41.80000	71.60000	-0.19029	-15.984	-0.034343	-15.985 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	41.00000	41.80000	71.60000	-0.19027	-15.983	-15.984	-0.017296 d
0.96258	41.01250	42.76250	71.60000	-0.17744	-14.905	-14.906	-0.016130 d
1.9252	41.02500	43.72500	71.60000	-0.16529	-13.885	-13.886	-0.015025 d
2.8877	41.03750	44.68750	71.60000	-0.15376	-12.916	-12.917	-0.013977 d
3.8503	41.05000	45.65000	71.60000	-0.14280	-11.995	-11.996	-0.012981 d
4.8129	41.06250	46.61250	71.60000	-0.13235	-11.118	-11.118	-0.012031 d
5.7755	41.07500	47.57500	71.60000	-0.12236	-10.278	-10.279	-0.011123 d
6.7381	41.08750	48.53750	71.60000	-0.11277	-9.4726	-9.4733	-0.010251 d
7.7006	41.10000	49.50000	71.60000	-0.10353	-8.6963	-8.6969	-0.0094107 d
8.6632	41.11250	50.46250	71.60000	-0.094578	-7.9445	-7.9451	-0.0085973 d
9.6258	41.12500	51.42500	71.60000	-0.085867	-7.2128	-7.2133	-0.0078054 d
10.588	41.13750	52.38750	71.60000	-0.077339	-6.4965	-6.4969	-0.0070302 d
11.551	41.15000	53.35000	71.60000	-0.068940	-5.7909	-5.7913	-0.0062667 d
12.514	41.16250	54.31250	71.60000	-0.060614	-5.0916	-5.0919	-0.0055099 d
13.476	41.17500	55.27500	71.60000	-0.052307	-4.3938	-4.3941	-0.0047547 d
14.439	41.18750	56.23750	71.60000	-0.045477	-3.8201	-3.8204	-0.0041340 d
15.401	41.20000	57.20000	71.60000	-0.041180	-3.4592	-3.4594	-0.0037434 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: West

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	58.70000	19.40000	77.00000	-1.2971	0.93955	0.90599	1.3207 d
0.97532	58.72500	20.37500	77.00000	-1.4508	0.95872	0.92121	1.4749 d
1.9506	58.75000	21.35000	77.00000	-1.6090	0.96126	0.91970	1.6331 d
2.9260	58.77500	22.32500	77.00000	-1.7698	0.94560	0.89993	1.7935 d
3.9013	58.80000	23.30000	77.00000	-1.9314	0.91034	0.86053	1.9541 d
4.8766	58.82500	24.27500	77.00000	-2.0911	0.85440	0.80052	2.1123 d
5.8519	58.85000	25.25000	77.00000	-2.2460	0.77719	0.71936	2.2652 d
6.8272	58.87500	26.22500	77.00000	-2.4798	0.70345	0.63965	2.4970 d
7.8026	58.90000	27.20000	77.00000	-2.6894	0.59576	0.52663	2.7038 d
8.7779	58.92500	28.17500	77.00000	-2.8651	0.45715	0.38356	2.8759 d
9.7532	58.95000	29.15000	77.00000	-3.0014	0.29351	0.21648	3.0079 d
10.729	58.97500	30.12500	77.00000	-3.0939	0.11206	0.032721	3.0957 d
11.704	59.00000	31.10000	77.00000	-4.5066	0.053019	-0.062515	4.5065 d
12.679	59.02500	32.07500	77.00000	-4.4968	0.052904	-0.062379	4.4967 d
13.654	59.05000	33.05000	77.00000	-4.4870	0.052788	-0.062243	4.4869 d
14.630	59.07500	34.02500	77.00000	-4.4772	0.052673	-0.062106	4.4771 d
15.605	59.10000	35.00000	77.00000	-4.4674	0.052557	-0.061970	4.4672 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.15000	35.00000	77.00000	-4.4311	0.052131	-4.4311	0.052131 d
0.96667	60.11667	35.00000	77.00000	-3.8379	0.045152	-3.8379	0.045152 d
1.9333	61.08333	35.00000	77.00000	-3.4754	0.040888	-3.4754	0.040888 d
2.9000	62.05000	35.00000	77.00000	-3.1130	0.036623	-3.1130	0.036623 d
3.8667	63.01667	35.00000	77.00000	-2.7505	0.032359	-2.7505	0.032359 d
4.8333	63.98333	35.00000	77.00000	-2.3881	0.028095	-2.3881	0.028095 d
5.8000	64.95000	35.00000	77.00000	-2.0256	0.023831	-2.0256	0.023831 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	65.00000	35.00000	77.00000	-2.0069	0.023611	-0.0037401	-2.0070 d
1.0100	64.99000	33.99000	77.00000	-2.0062	0.023602	-0.0037388	-2.0063 d
2.0201	64.98000	32.98000	77.00000	-2.0055	0.023594	-0.0037375	-2.0056 d
3.0301	64.97000	31.97000	77.00000	-2.0048	0.023586	-0.0037362	-2.0049 d
4.0402	64.96000	30.96000	77.00000	-2.0041	0.023577	-0.0037348	-2.0042 d

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular
5.0502	64.95000	29.95000	77.00000	-1.3329	0.045750	-0.032552	-1.3332 d
6.0603	64.94000	28.94000	77.00000	-1.2977	0.10457	-0.091721	-1.2986 d
7.0703	64.93000	27.93000	77.00000	-1.2493	0.15853	-0.14615	-1.2509 d
8.0804	64.92000	26.92000	77.00000	-1.1891	0.20600	-0.19422	-1.1911 d
9.0904	64.91000	25.91000	77.00000	-1.1184	0.24563	-0.23455	-1.1208 d
10.100	64.90000	24.90000	77.00000	-1.0387	0.27635	-0.26605	-1.0414 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - Mid

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.95000	24.90000	77.00000	-1.0282	0.27294	-1.0221	-0.29497 d
0.58310	65.45000	24.60000	77.00000	-0.89879	0.24531	-0.89692	-0.25207 d
1.1662	65.95000	24.30000	77.00000	-0.77033	0.21576	-0.77156	-0.21132 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - South

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.00000	24.30000	77.00000	-0.75992	0.21238	-0.16909	-0.77071 d
1.0617	65.94000	23.24000	77.00000	-0.68471	0.22364	-0.18459	-0.69625 d
2.1234	65.88000	22.18000	77.00000	-0.60296	0.22551	-0.19108	-0.61474 d
3.1851	65.82000	21.12000	77.00000	-0.51613	0.21763	-0.18811	-0.52760 d
4.2468	65.76000	20.06000	77.00000	-0.42558	0.19983	-0.17546	-0.43620 d
5.3085	65.70000	19.00000	77.00000	-0.33260	0.17219	-0.15312	-0.34180 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: South

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	58.75000	19.40000	77.00000	-1.2927	0.93336	-1.3445	0.85698 d
0.98737	59.73571	19.34286	77.00000	-1.1893	0.81191	-1.2343	0.74172 d
1.9747	60.72143	19.28571	77.00000	-1.0728	0.69493	-1.1113	0.63168 d
2.9621	61.70714	19.22857	77.00000	-0.94483	0.58250	-0.97696	0.52684 d
3.9495	62.69286	19.17143	77.00000	-0.80656	0.47458	-0.83267	0.42711 d
4.9368	63.67857	19.11429	77.00000	-0.65914	0.37110	-0.67951	0.33233 d
5.9242	64.66429	19.05714	77.00000	-0.50358	0.27189	-0.51847	0.24229 d
6.9116	65.65000	19.00000	77.00000	-0.34076	0.17680	-0.35042	0.15678 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 24 Netherhall Gardens | Sub-structure: Front

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	30.00000	4.70000	71.00000	0.074831 d
0.94000	30.00000	5.64000	71.00000	0.11404 d
1.8800	30.00000	6.58000	71.00000	0.14947 d
2.8200	30.00000	7.52000	71.00000	0.19177 d
3.7600	30.00000	8.46000	71.00000	0.25003 d
4.7000	30.00000	9.40000	71.00000	0.53748 d
5.6400	30.00000	10.34000	71.00000	0.88360 d
6.5800	30.00000	11.28000	71.00000	1.2635 d
7.5200	30.00000	12.22000	71.00000	1.6799 d
8.4600	30.00000	13.16000	71.00000	2.1340 d
9.4000	30.00000	14.10000	71.00000	2.6255 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	32.00000	15.10000	71.00000	3.1940 d
1.0286	33.02857	15.10000	71.00000	3.1975 d
2.0571	34.05714	15.10000	71.00000	3.2010 d
3.0857	35.08571	15.10000	71.00000	3.2046 d
4.1143	36.11429	15.10000	71.00000	3.2081 d
5.1429	37.14286	15.10000	71.00000	3.2117 d
6.1714	38.17143	15.10000	71.00000	3.2152 d
7.2000	39.20000	15.10000	71.00000	3.2187 d

d - Displacements include imported displacements.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	39.40000	14.20000	71.00000	2.7103 d
0.85000	40.25000	14.20000	71.00000	2.7131 d
1.7000	41.10000	14.20000	71.00000	2.7158 d
2.5500	41.95000	14.20000	71.00000	2.7186 d
3.4000	42.80000	14.20000	71.00000	2.7214 d
4.2500	43.65000	14.20000	71.00000	2.2806 d
5.1000	44.50000	14.20000	71.00000	2.2439 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	44.60000	14.20000	71.00000	2.2384 d
0.99000	44.60000	13.21000	71.00000	1.8157 d
1.9800	44.60000	12.22000	71.00000	1.4189 d
2.9700	44.60000	11.23000	71.00000	1.0486 d
3.9600	44.60000	10.24000	71.00000	0.70415 d
4.9500	44.60000	9.25000	71.00000	0.38349 d
5.9400	44.60000	8.26000	71.00000	0.15585 d
6.9300	44.60000	7.27000	71.00000	0.11857 d
7.9200	44.60000	6.28000	71.00000	0.091322 d
8.9100	44.60000	5.29000	71.00000	0.066909 d
9.9000	44.60000	4.30000	71.00000	0.036817 d

d - Displacements include imported displacements.

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	29.00000	57.20000	71.60000	2.0280 d
1.0167	29.00000	56.18333	71.60000	2.5522 d
2.0333	29.00000	55.16667	71.60000	3.1181 d
3.0500	29.00000	54.15000	71.60000	3.7217 d
4.0667	29.00000	53.13333	71.60000	4.3564 d
5.0833	29.00000	52.11667	71.60000	5.0137 d
6.1000	29.00000	51.10000	71.60000	5.6828 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	30.70000	51.10000	71.60000	5.6694 d
1.0223	30.68889	50.07778	71.60000	6.3414 d
2.0446	30.67778	49.05556	71.60000	6.9974 d
3.0668	30.66667	48.03333	71.60000	7.6199 d
4.0891	30.65556	47.01111	71.60000	8.1893 d
5.1114	30.64444	45.98889	71.60000	8.6837 d
6.1337	30.63333	44.96667	71.60000	9.0790 d
7.1560	30.62222	43.94444	71.60000	9.3489 d
8.1783	30.61111	42.92222	71.60000	9.4650 d
9.2005	30.60000	41.90000	71.60000	9.3965 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	30.65000	41.90000	71.60000	9.3966 d
1.0250	31.67500	41.89000	71.60000	9.3970 d
2.0501	32.70000	41.88000	71.60000	9.3973 d
3.0751	33.72500	41.87000	71.60000	9.3977 d
4.1002	34.75000	41.86000	71.60000	9.3981 d
5.1252	35.77500	41.85000	71.60000	9.3984 d
6.1503	36.80000	41.84000	71.60000	9.3988 d
7.1753	37.82500	41.83000	71.60000	9.3991 d
8.2004	38.85000	41.82000	71.60000	9.3995 d
9.2254	39.87500	41.81000	71.60000	9.3999 d
10.250	40.90000	41.80000	71.60000	9.4002 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	41.00000	41.80000	71.60000	9.4004 d
0.96258	41.01250	42.76250	71.60000	9.4659 d
1.9252	41.02500	43.72500	71.60000	9.3667 d
2.8877	41.03750	44.68750	71.60000	9.1287 d
3.8503	41.05000	45.65000	71.60000	8.7759 d
4.8129	41.06250	46.61250	71.60000	8.3305 d
5.7755	41.07500	47.57500	71.60000	7.8131 d
6.7381	41.08750	48.53750	71.60000	7.2424 d
7.7006	41.10000	49.50000	71.60000	6.6356 d
8.6632	41.11250	50.46250	71.60000	6.0080 d
9.6258	41.12500	51.42500	71.60000	5.3732 d
10.588	41.13750	52.38750	71.60000	4.7431 d
11.551	41.15000	53.35000	71.60000	4.1277 d
12.514	41.16250	54.31250	71.60000	3.5356 d
13.476	41.17500	55.27500	71.60000	2.9734 d
14.439	41.18750	56.23750	71.60000	2.4461 d
15.401	41.20000	57.20000	71.60000	1.9567 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: West

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	58.70000	19.40000	77.00000	1.0731 d
0.97532	58.72500	20.37500	77.00000	1.2694 d
1.9506	58.75000	21.35000	77.00000	1.4611 d
2.9260	58.77500	22.32500	77.00000	1.6459 d
3.9013	58.80000	23.30000	77.00000	1.8215 d
4.8766	58.82500	24.27500	77.00000	1.9852 d
5.8519	58.85000	25.25000	77.00000	2.1343 d
6.8272	58.87500	26.22500	77.00000	2.2660 d
7.8026	58.90000	27.20000	77.00000	2.3777 d
8.7779	58.92500	28.17500	77.00000	2.4670 d
9.7532	58.95000	29.15000	77.00000	2.5316 d
10.729	58.97500	30.12500	77.00000	2.5698 d
11.704	59.00000	31.10000	77.00000	3.0620 d
12.679	59.02500	32.07500	77.00000	3.0543 d
13.654	59.05000	33.05000	77.00000	3.0466 d
14.630	59.07500	34.02500	77.00000	3.0388 d
15.605	59.10000	35.00000	77.00000	3.0311 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	59.15000	35.00000	77.00000	3.0026 d
0.96667	60.11667	35.00000	77.00000	2.4712 d
1.9333	61.08333	35.00000	77.00000	1.9779 d
2.9000	62.05000	35.00000	77.00000	1.5245 d
3.8667	63.01667	35.00000	77.00000	1.1107 d
4.8333	63.98333	35.00000	77.00000	0.73457 d
5.8000	64.95000	35.00000	77.00000	0.39239 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	65.00000	35.00000	77.00000	0.37552 d
1.0100	64.99000	33.99000	77.00000	0.37488 d
2.0201	64.98000	32.98000	77.00000	0.37425 d

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
3.0301	64.97000	31.97000	77.00000	0.37362 d
4.0402	64.96000	30.96000	77.00000	0.37298 d
5.0502	64.95000	29.95000	77.00000	0.27499 d
6.0603	64.94000	28.94000	77.00000	0.25746 d
7.0703	64.93000	27.93000	77.00000	0.22603 d
8.0804	64.92000	26.92000	77.00000	0.18122 d
9.0904	64.91000	25.91000	77.00000	0.15619 d
10.100	64.90000	24.90000	77.00000	0.14395 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - Mid

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	64.95000	24.90000	77.00000	0.14199 d
0.58310	65.45000	24.60000	77.00000	0.12107 d
1.1662	65.95000	24.30000	77.00000	0.10391 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	66.00000	24.30000	77.00000	0.10262 d
1.0617	65.94000	23.24000	77.00000	0.094638 d
2.1234	65.88000	22.18000	77.00000	0.086235 d
3.1851	65.82000	21.12000	77.00000	0.077476 d
4.2468	65.76000	20.06000	77.00000	0.068246 d
5.3085	65.70000	19.00000	77.00000	0.058190 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1					
0.0	58.75000	19.40000	77.00000	1.0592 d
0.98737	59.73571	19.34286	77.00000	0.77791 d
1.9747	60.72143	19.28571	77.00000	0.50614 d
2.9621	61.70714	19.22857	77.00000	0.24402 d
3.9495	62.69286	19.17143	77.00000	0.12390 d
4.9368	63.67857	19.11429	77.00000	0.098041 d
5.9242	64.66429	19.05714	77.00000	0.077929 d
6.9116	65.65000	19.00000	77.00000	0.059169 d

d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.94000	0.13840	None	0.0	0.037499	0.037499	-374.85E-6	-41.699E-6	790170.	0 (Negligible)
	2	1.0784	8.2216	Hogging	0.0081362	0.037499	0.042015	-374.85E-6	-522.65E-6	6721.9	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	0.17815	Hogging	0.0	2.5379E-6	2.5392E-6	0.0	-3.4379E-6	6.1126E+9	0 (Negligible)
	2	0.17815	6.7897	Hogging	0.0	2.5378E-6	2.6107E-6	0.0	-3.4446E-6	675.95E+6	0 (Negligible)
	3	6.9679	0.13210	None	0.0	2.5378E-6	2.5392E-6	0.0	-3.4446E-6	7.8974E+9	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.7000	Hogging	0.0	2.5483E-6	2.5392E-6	0.0	-3.2474E-6	288.60E+6	0 (Negligible)
	2	1.7000	1.9867	Sagging	0.0063887	-0.0019377	0.0056664	134.46E-6	518.64E-6	6317.2	0 (Negligible)
	3	3.6867	1.3133	Hogging	0.011538	-0.014665	0.0086358	155.83E-6	518.64E-6	1139.3	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	6.9300	Hogging	0.0049027	0.024510	0.026827	-267.32E-6	426.86E-6	8153.8	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	6.0000	Hogging	0.0021738	0.066311	0.067206	-750.34E-6	-657.68E-6	24232.	1 (Very Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	9.1500	Sagging	0.010145	0.091830	0.10437	-0.0011180	-656.84E-6	5293.9	2 (Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	9.7232	Sagging	0.0	0.0	0.0	0.0	0.0	418.96E+6	0 (Negligible)
	2	9.7232	0.47678	None	0.0	0.0	0.0	0.0	0.0	4.4059E+9	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	9.2829	Sagging	0.010246	0.091675	0.10445	-0.0011183	658.98E-6	5429.6	2 (Slight)
	2	9.2829	6.0171	Hogging	0.0022464	0.066089	0.067212	-759.64E-6	658.98E-6	22469.	1 (Very Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	8.9795	Sagging	0.0016459	-0.0062027	0.0013092	171.33E-6	-201.27E-6	39028.	0 (Negligible)
	2	8.9795	2.1504	Hogging	0.0068338	-0.016531	0.0053625	188.44E-6	-504.70E-6	9969.3	0 (Negligible)
	3	11.130	2.5246	Sagging	0.0089466	-0.0022092	0.0073413	97.655E-6	-504.70E-6	6977.4	0 (Negligible)
	4	13.654	1.8956	Hogging	0.0	13.957E-6	14.055E-6	0.0	7.9304E-6	134.73E+6	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	5.7000	Hogging	0.0029407	0.041543	0.044395	-613.28E-6	549.46E-6	23776.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	2.0201	Hogging	0.0	0.0	0.0	0.0	0.0	9.2992E+9	0 (Negligible)
	2	2.0201	2.7241	Sagging	0.0018369	-737.24E-6	0.0014053	28.531E-6	97.020E-6	35776.	0 (Negligible)
	3	4.7442	1.9756	Hogging	960.35E-6	-0.0052360	0.0011864	58.584E-6	97.020E-6	82389.	0 (Negligible)
	4	6.7198	0.69896	Sagging	328.54E-6	-0.0050747	0.0010324	53.892E-6	44.361E-6	196870.	0 (Negligible)
	5	7.4188	2.5812	Hogging	487.20E-6	-0.0038812	824.08E-6	47.589E-6	44.361E-6	68258.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.1000	Hogging	159.32E-6	0.021484	0.021518	-214.93E-6	35.873E-6	85227.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	0.0	None	0.0	0.0	0.0	14.592E-6	7.5220E-6	2.6045E+6	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	3.9495	Hogging	0.0028713	0.012960	0.015012	-155.09E-6	284.83E-6	10096.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Vertical Offset from Line for Vertical Movement	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement	Maximum Gradient of Vertical Displacement	Min. Radius of Curvature	Damage Category

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0081362	0.037499	-522.65E-6	2.5732	0.042015	-374.85E-6	-522.65E-6	6721.9		- 0 (Negligible)

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	2.5379E-6	-3.4446E-6	3.2184	2.6107E-6	0.0	-3.4446E-6	675.95E+6		- 0 (Negligible)

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.011538	-0.014665	518.64E-6	2.7213	0.0086358	155.83E-6	518.64E-6	1139.3	6317.2	0 (Negligible)

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0049027	0.024510	426.86E-6	2.2384	0.026827	-267.32E-6	426.86E-6	8153.8		- 0 (Negligible)

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0021738	0.066311	-657.68E-6	5.6170	0.067206	-750.34E-6	-657.68E-6	24232.		- 1 (Very Slight)

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.010145	0.091830	-656.84E-6	9.4618	0.10437	-0.0011180	-656.84E-6	-	5293.9	2 (Slight)

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	0.0	0.0	9.4002	0.0	0.0	0.0	- 418.96E+6		0 (Negligible)

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.010246	0.091675	658.98E-6	9.4642	0.10445	-0.0011183	658.98E-6	22469.	5429.6	2 (Slight)

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0089466	-0.016531	-504.70E-6	3.0619	0.0073413	188.44E-6	-504.70E-6	9969.3	6977.4	0 (Negligible)

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0029407	0.041543	549.46E-6	3.0026	0.044395	-613.28E-6	549.46E-6	23776.		- 0 (Negligible)

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0018369	-0.0052360	97.020E-6	0.37552	0.0014053	58.584E-6	97.020E-6	68258.	35776.	0 (Negligible)

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from	Deflection Ratio	Average Horizontal	Maximum Slope	Maximum Settlement	Max. Tensile	Maximum Gradient of	Maximum Gradient of	Min. Radius of	Min. Radius of	Damage Category

Line for Vertical Movement Calculations	Strain			Strain	Horizontal Displacement Curve	Vertical Displacement Curve	Curvature (Hogging)	Curvature (Sagging)	
[m]	[%]	[%]	[mm]	[%]			[m]	[m]	
0.0	159.32E-6	0.021484	35.873E-6	0.14199	0.021518	-214.93E-6	35.873E-6	85227.	- 0 (Negligible)

Structure: Rear Structures | Sub-structure: East - South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	0.0	7.5220E-6	0.10262	0.0	14.592E-6	7.5220E-6	-	- 0	(Negligible)

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0028713	0.012960	284.83E-6	1.0592	0.015012	-155.09E-6	284.83E-6	10096.	- 0	(Negligible)

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
				[m]	[m]			[mm]	[%]	[m]	[m]	
24 Netherhall Gardens	Maximum Slope	Front	2	1.0784	9.3000	Hogging	**522.65E-6**	2.5732	0.042015	6721.9	- 0	(Negligible)
	Maximum Settlement	Side	3	6.9679	7.1000	Sagging	3.4446E-6	**3.2184**	2.5392E-6	- 7.8974E+9	0	(Negligible)
	Max. Tensile Strain	Front	2	1.0784	9.3000	Hogging	522.65E-6	2.5732	**0.042015**	6721.9	- 0	(Negligible)
	Min. Radius of Curvature (Hogging)	Front	2	1.0784	9.3000	Hogging	522.65E-6	2.5732	0.042015	**6721.9**	- 0	(Negligible)
	Min. Radius of Curvature (Sagging)		-	-	-	-	-	-	-	-	-	-
24 netherhall Gardens	Maximum Slope	Rear Side	2	1.7000	3.6867	Sagging	**518.64E-6**	2.7213	0.0056664	-	6317.2	0 (Negligible)
	Maximum Settlement	Rear Side	2	1.7000	3.6867	Sagging	518.64E-6	**2.7213**	0.0056664	-	6317.2	0 (Negligible)
	Max. Tensile Strain	Rear Side	3	3.6867	5.0000	Hogging	518.64E-6	2.5727	**0.0086358**	1139.3	- 0	(Negligible)
	Min. Radius of Curvature (Hogging)	Rear Side	3	3.6867	5.0000	Hogging	518.64E-6	2.5727	0.0086358	**1139.3**	- 0	(Negligible)
	Min. Radius of Curvature (Sagging)	Rear Side	2	1.7000	3.6867	Sagging	518.64E-6	2.7213	0.0056664	-	**6317.2** 0	(Negligible)
28 Netherhall Gardens	Maximum Slope	Rear	1	0.0	9.2829	Sagging	**658.98E-6**	9.4642	0.10445	-	5429.6 2	(Slight)
	Maximum Settlement	Rear	1	0.0	9.2829	Sagging	658.98E-6	**9.4642**	0.10445	-	5429.6 2	(Slight)
	Max. Tensile Strain	Rear	1	0.0	9.2829	Sagging	658.98E-6	9.4642	**0.10445**	-	5429.6 2	(Slight)
	Min. Radius of Curvature (Hogging)	Rear	2	9.2829	15.300	Hogging	658.98E-6	5.5993	0.067212	**22469.**	- 1	(Very Slight)
	Min. Radius of Curvature (Sagging)	Front South	1	0.0	9.1500	Sagging	656.84E-6	9.4618	0.10437	-	**5293.9** 2	(Slight)
Rear Structures	Maximum Slope	North	1	0.0	5.7000	Hogging	**549.46E-6**	3.0026	0.044395	23776.	- 0	(Negligible)
	Maximum Settlement	West	3	11.130	13.654	Sagging	504.70E-6	**3.0619**	0.0073413	-	6977.4 0	(Negligible)
	Max. Tensile Strain	North	1	0.0	5.7000	Hogging	549.46E-6	3.0026	**0.044395**	23776.	- 0	(Negligible)
	Min. Radius of Curvature (Hogging)	West	2	8.9795	11.130	Hogging	504.70E-6	2.7724	0.0053625	**9969.3**	- 0	(Negligible)
	Min. Radius of Curvature (Sagging)	West	3	11.130	13.654	Sagging	504.70E-6	3.0619	0.0073413	-	**6977.4** 0	(Negligible)

Specific Building Damage Results - All Combined Segments

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

Vertical Offset from Line for Vertical	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - South

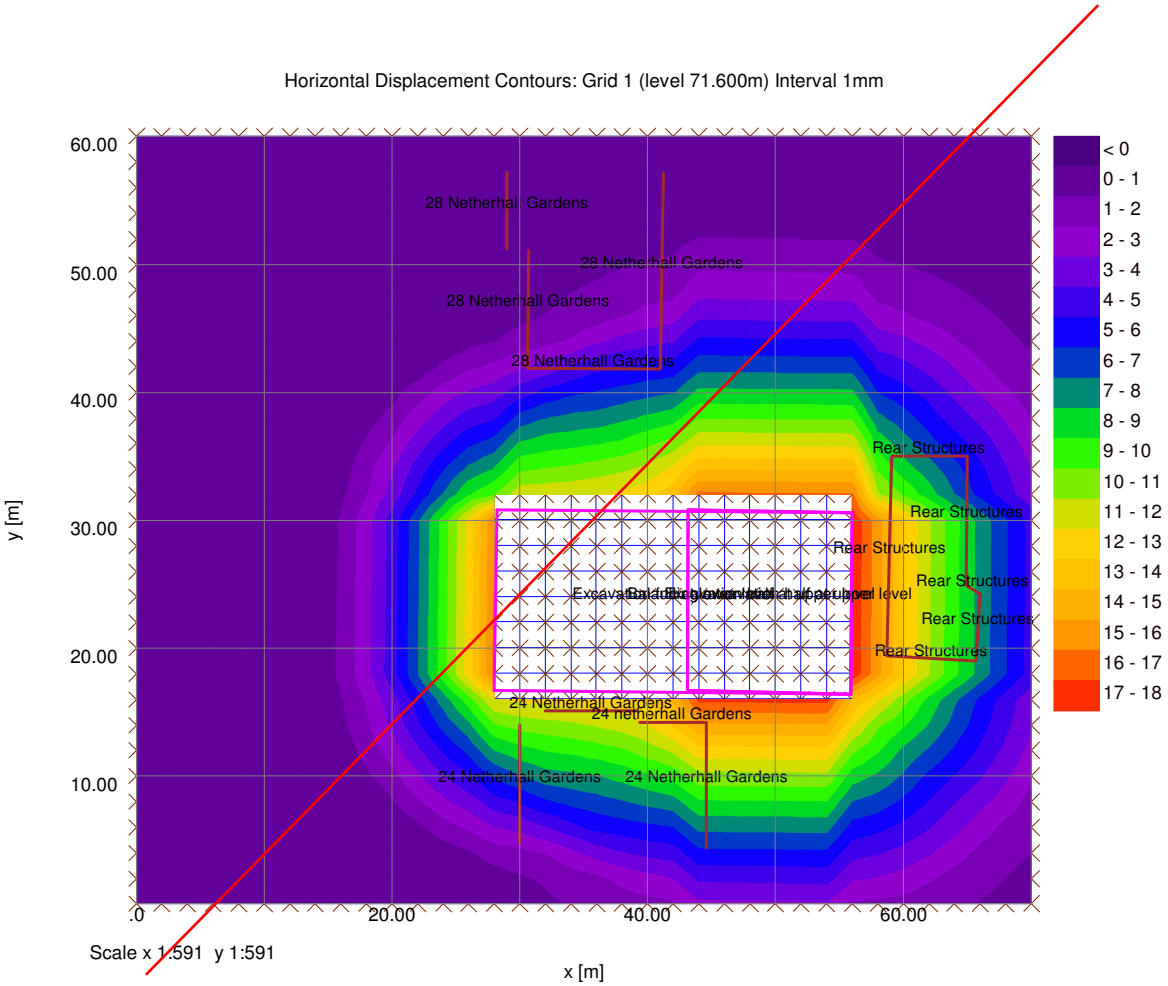
Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.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60.00
50.00
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Scale x 1:591 y 1:591
28 Netherhall Gardens
28 Netherhall Gardens
28 Netherhall Gardens
28 Netherhall Gardens
Rear Structures
Rear Structures
Rear Structures
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Rear Structures
Rear Structures
24 Netherhall Gardens
24 Netherhall Gardens
24 Netherhall Gardens
24 Netherhall Gardens
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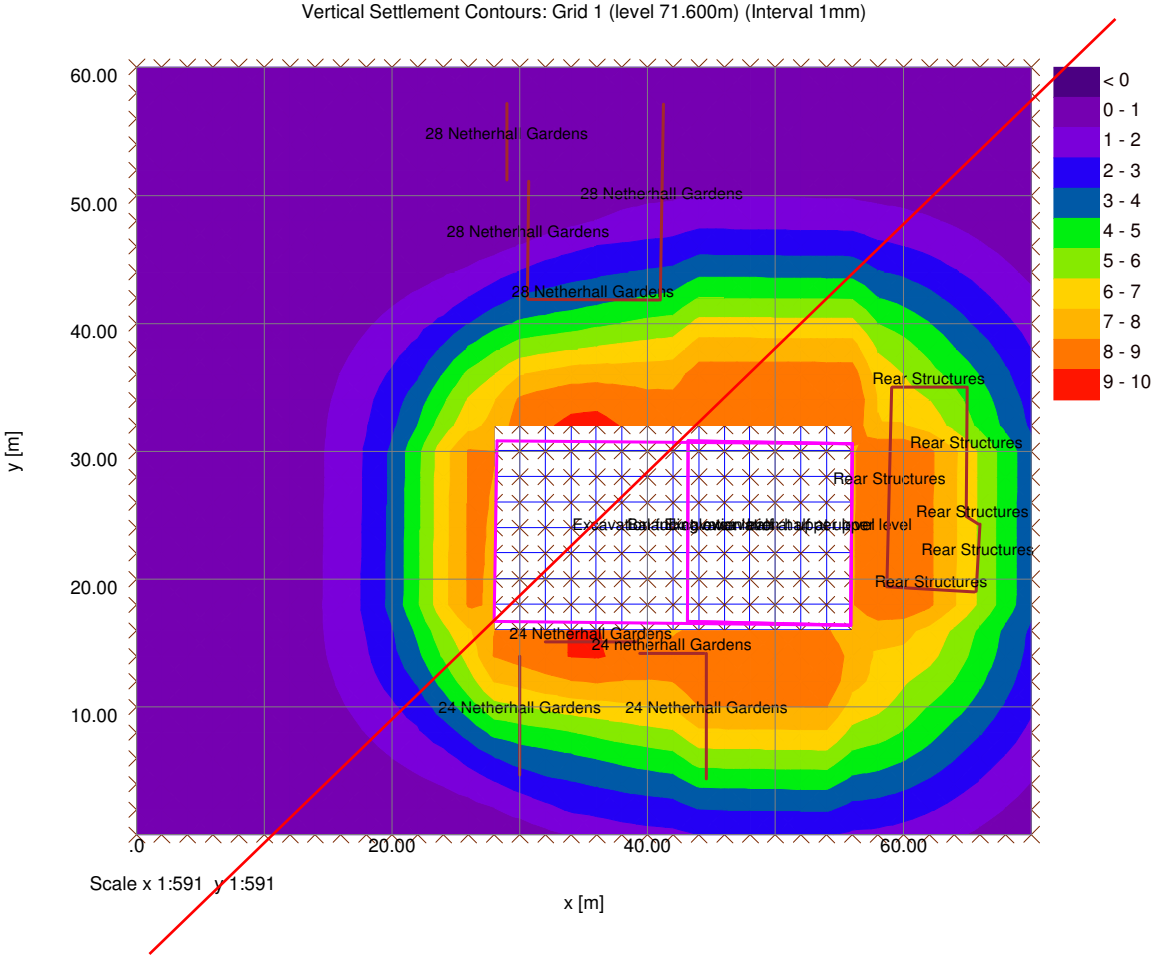
Vertical Settlement Contours: Grid 1 (level 71.600m) (Interval 1mm)



Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type	Name	Direction of extrusion	Point/Line/Line for extrusion First point X [m]	First point Y [m]	First point Z(level) [m]	Second point X [m]	Second point Y [m]	Second point Z(level) [m]	No. of intervals across extrusion/line	Extrusion depth [m]	No. of intervals along extrusion	Calculate	Surface type for tunnels
Grid	Grid 1	Global X	0.00000	0.00000	71.60000	-	60.00000	71.60000	30	70.00000	35	Yes	Sub-surface
Line	Line 1	-	30.00000	4.70000	71.00000	30.00000	14.10000	71.00000	10	-	-	Yes	Sub-surface
Line	Line 2	-	32.00000	15.10000	71.00000	39.20000	15.10000	71.00000	7	-	-	Yes	Sub-surface
Line	Line 3	-	39.40000	14.20000	71.00000	44.50000	14.20000	71.00000	6	-	-	Yes	Sub-surface
Line	Line 4	-	44.60000	14.20000	71.00000	44.60000	4.30000	71.00000	10	-	-	Yes	Sub-surface
Line	Line 5	-	29.00000	57.20000	71.60000	29.00000	51.10000	71.60000	6	-	-	Yes	Sub-surface
Line	Line 6	-	30.70000	51.10000	71.60000	30.60000	41.90000	71.60000	9	-	-	Yes	Sub-surface
Line	Line 7	-	30.65000	41.90000	71.60000	40.90000	41.80000	71.60000	10	-	-	Yes	Sub-surface
Line	Line 8	-	41.00000	41.80000	71.60000	41.20000	57.20000	71.60000	16	-	-	Yes	Sub-surface
Line	Line 9	-	58.70000	19.40000	77.00000	59.10000	35.00000	77.00000	16	-	-	Yes	Sub-surface
Line	Line 10	-	59.15000	35.00000	77.00000	64.95000	35.00000	77.00000	6	-	-	Yes	Sub-surface
Line	Line 11	-	65.00000	35.00000	77.00000	64.90000	24.90000	77.00000	10	-	-	Yes	Sub-surface
Line	Line 12	-	64.95000	24.90000	77.00000	65.95000	24.30000	77.00000	2	-	-	Yes	Sub-surface
Line	Line 13	-	66.00000	24.30000	77.00000	65.70000	19.00000	77.00000	5	-	-	Yes	Sub-surface
Line	Line 14	-	58.75000	19.40000	77.00000	65.65000	19.00000	77.00000	7	-	-	Yes	Sub-surface

Vertical Ground Movement Curves

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)**

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: z = $-2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))**

Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Polygonal Excavations

Excavation Name: **Excavation full at lower level**
Surface level [m]: 72.600
Contribution: Positive
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 69.000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	Previous Side p1 [%]	Previous Side p2* [%]	Next Side d [m]	Next Side p1 [%]	Next Side p2* [%]
1	28.000	16.700	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	28.200	30.800	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	56.000	30.600	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	55.900	16.400	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
1	28.000	16.700	28.200	30.800	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	28.200	30.800	56.000	30.600	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	56.000	30.600	55.900	16.400	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	55.900	16.400	28.000	16.700	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Excavation Name: **Excavation half at upper level**
Surface level [m]: 75.000
Contribution: Positive
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 69.000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	Previous Side p1 [%]	Previous Side p2* [%]	Next Side d [m]	Next Side p1 [%]	Next Side p2* [%]
1	43.100	16.700	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	43.200	30.800	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	56.000	30.600	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	55.900	16.400	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
1	43.100	16.700	43.200	30.800	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	43.200	30.800	56.000	30.600	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	56.000	30.600	55.900	16.400	Excavation in front of high stiffness wall in stiff clay	Excavation in front of high stiffness wall in stiff clay

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
4	55.900	16.400	43.100	16.700	(CIRIA 580 Fig. 2.11(b)) Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	(CIRIA 580 Fig. 2.11(a)) Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Excavation Name: Balancing excavation half at upper level
Surface level [m]: 72.600
Contribution: Negative
Enabled: Yes
Surface movement curves which are selected are applied between surface and [m]: 69.000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	Previous Side pl [%]	Previous Side p2* [%]	Next Side d [m]	Next Side pl [%]	Next Side p2* [%]
1	43.100	16.700	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	43.200	30.800	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	56.000	30.600	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	55.900	16.400	69.000	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	Corner 1 y [m]	Corner 2 x [m]	Corner 2 y [m]	Ground Movement Curve Vertical	Ground Movement Curve Horizontal
1	43.100	16.700	43.200	30.800	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	43.200	30.800	56.000	30.600	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	56.000	30.600	55.900	16.400	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	55.900	16.400	43.100	16.700	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Line	Start Distance Along Line [m]	End Distance Along Line [m]	Vertical Offsets from Line for Vertical Movement Calculations [m]	Vertical Displacement Limit Sensitivity [mm]	Damage Category Strains	Poisson's Ratio	E/G
24 Netherhall Gardens	Front	Line 1	0.00000	9.30000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 Netherhall Gardens	Side	Line 2	0.00000	7.10000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 netherhall Gardens	Rear Side	Line 3	0.00000	5.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
24 Netherhall Gardens	Rear	Line 4	0.00000	9.80000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Front North	Line 5	0.00000	6.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Front South	Line 6	0.00000	9.15000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Side	Line 7	0.00000	10.20000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
28 Netherhall Gardens	Rear	Line 8	0.00000	15.30000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	West	Line 9	0.00000	15.55000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	North	Line 10	0.00000	5.70000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - North	Line 11	0.00000	10.00000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - Mid	Line 12	0.00000	1.10000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	East - South	Line 13	0.00000	5.25000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Rear Structures	South	Line 14	0.00000	6.85000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000

Specific Structures - Bending Parameters

Structure Name	Sub-Structure Name	Height [m]	Default Properties	Hogging 2nd Moment of Area (per unit width) [m³]	Hogging Distance of Bending Strain from N.A. [m]	Hogging Distance of N.A. from Edge of Beam in Tension [m]	Sagging 2nd Moment of Area (per unit width) [m³]	Sagging Distance of Bending Strain from N.A. [m]	Sagging Distance of N.A. from Edge of Beam in Tension [m]
24 Netherhall Gardens	Front	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 Netherhall Gardens	Side	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 netherhall Gardens	Rear Side	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
24 Netherhall Gardens	Rear	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
28 Netherhall Gardens	Front North	11.000	Yes	443.67	11.000	11.000	110.92	5.5000	5.5000
28 Netherhall Gardens	Front South	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
28 Netherhall Gardens	Side	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
28 Netherhall Gardens	Rear	9.0000	Yes	243.00	9.0000	9.0000	60.750	4.5000	4.5000
Rear Structures	West	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	North	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - North	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - Mid	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	East - South	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000
Rear Structures	South	4.0000	Yes	21.333	4.0000	4.0000	5.3333	2.0000	2.0000

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations [m]	Segment Start [m]	Length [m]	Curvature	Combined Segment

No structures have segments combined.

Warnings

1 Multiple excavations have been specified. The displacements resulting from these excavations are calculated by summing the displacements resulting from each individual excavation. No account has been taken of the interactions between excavations (e.g. overlapping zones of influence or 'shielding' of one excavation by another).
2 Embedded Wall Excavation PE1 : Excavation full at lower level intersects PE2 : Excavation half at upper level, and PE3 : Balancing excavation half at upper level.
3 Embedded Wall Excavation PE2 : Excavation half at upper level intersects PE1 : Excavation full at lower level.
4 Embedded Wall Excavation PE3 : Balancing excavation half at upper level intersects

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical	Segment Start Length Curvature	Combined Segment

PE1 : Excavation full at lower level.

5 If an embedded wall excavation is assigned a 'surface' ground movement curve and if the 'allow movement calculation to level' option is checked for the excavation then displacements induced by it are calculated for points at the surface, and points below the surface to the level specified. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 1/Line 9/Vertical. This is an example only. There are 143 others.

Displacement and Strain Results

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement along the Line	Horizontal displacement perpendicular to Line	to x Axis	
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	
Grid 1	Grid 1	0.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	0.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	0.00000	71.60000	0.0	0.0	0.0069096	-	-	-	*
		26.00000	0.00000	71.60000	0.013318	0.013007	0.10157	-	-	-	*
		28.00000	0.00000	71.60000	0.19406	0.21462	0.17076	-	-	-	*
		30.00000	0.00000	71.60000	0.34331	0.43766	0.39756	-	-	-	*
		32.00000	0.00000	71.60000	0.45195	0.67996	0.73102	-	-	-	*
		34.00000	0.00000	71.60000	0.50995	0.93585	1.0450	-	-	-	*
		36.00000	0.00000	71.60000	0.50798	1.1948	1.3323	-	-	-	*
		38.00000	0.00000	71.60000	0.43997	1.4407	1.5789	-	-	-	*
		40.00000	0.00000	71.60000	0.30668	1.6521	1.7136	-	-	-	*
		42.00000	0.00000	71.60000	0.11893	1.8055	1.7646	-	-	-	*
		44.00000	0.00000	71.60000	0.064368	2.7464	1.9851	-	-	-	*
		46.00000	0.00000	71.60000	0.064780	2.7639	1.9999	-	-	-	*
		48.00000	0.00000	71.60000	0.065192	2.7815	2.0147	-	-	-	*
		50.00000	0.00000	71.60000	0.065603	2.7991	2.0296	-	-	-	*
		52.00000	0.00000	71.60000	0.066156	2.8227	2.0447	-	-	-	*
		54.00000	0.00000	71.60000	0.066956	2.8568	2.0598	-	-	-	*
		56.00000	0.00000	71.60000	-0.011636	1.9082	1.8420	-	-	-	*
		58.00000	0.00000	71.60000	-0.22440	1.7525	1.7737	-	-	-	*
		60.00000	0.00000	71.60000	-0.39114	1.5645	1.6208	-	-	-	*
		62.00000	0.00000	71.60000	-0.49520	1.3314	1.3992	-	-	-	*
		64.00000	0.00000	71.60000	-0.53164	1.0764	1.1275	-	-	-	*
		66.00000	0.00000	71.60000	-0.50423	0.81875	0.82290	-	-	-	*
		68.00000	0.00000	71.60000	-0.42168	0.57153	0.49732	-	-	-	*
		70.00000	0.00000	71.60000	-0.29430	0.34231	0.15450	-	-	-	*
		0.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	2.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	2.00000	71.60000	0.0	0.0	0.11603	-	-	-	*
		22.00000	2.00000	71.60000	0.0	0.0	0.33066	-	-	-	*
		24.00000	2.00000	71.60000	0.0	0.0	0.49137	-	-	-	*
		26.00000	2.00000	71.60000	0.21368	0.18369	0.63582	-	-	-	*
		28.00000	2.00000	71.60000	0.39755	0.38702	0.92921	-	-	-	*
		30.00000	2.00000	71.60000	0.56017	0.62858	1.3231	-	-	-	*
		32.00000	2.00000	71.60000	0.67903	0.89925	1.7148	-	-	-	*
		34.00000	2.00000	71.60000	0.73987	1.1952	2.1007	-	-	-	*
		36.00000	2.00000	71.60000	0.75494	1.5630	2.2472	-	-	-	*
		38.00000	2.00000	71.60000	0.73771	2.1263	2.3784	-	-	-	*
		40.00000	2.00000	71.60000	0.54724	2.5950	2.4976	-	-	-	*
		42.00000	2.00000	71.60000	0.21774	2.9098	2.5853	-	-	-	*
		44.00000	2.00000	71.60000	0.096967	4.1373	2.9784	-	-	-	*
		46.00000	2.00000	71.60000	0.097764	4.1713	2.9976	-	-	-	*
		48.00000	2.00000	71.60000	0.098561	4.2053	3.0169	-	-	-	*
		50.00000	2.00000	71.60000	0.099358	4.2393	3.0363	-	-	-	*
		52.00000	2.00000	71.60000	0.10016	4.2733	3.0558	-	-	-	*
		54.00000	2.00000	71.60000	0.10095	4.3073	3.0754	-	-	-	*
		56.00000	2.00000	71.60000	-0.021537	3.1014	2.6829	-	-	-	*
		58.00000	2.00000	71.60000	-0.41951	2.8767	2.5812	-	-	-	*
		60.00000	2.00000	71.60000	-0.70266	2.4679	2.3710	-	-	-	*
		62.00000	2.00000	71.60000	-0.81955	1.9347	2.0765	-	-	-	*
		64.00000	2.00000	71.60000	-0.75538	1.3429	1.7254	-	-	-	*
		66.00000	2.00000	71.60000	-0.72945	1.0400	1.3433	-	-	-	*
		68.00000	2.00000	71.60000	-0.63858	0.75996	0.94987	-	-	-	*
		70.00000	2.00000	71.60000	-0.50030	0.51095	0.55569	-	-	-	*
		0.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	4.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	4.00000	71.60000	0.0	0.0	0.25888	-	-	-	*
		20.00000	4.00000	71.60000	0.0	0.0	0.54758	-	-	-	*
		22.00000	4.00000	71.60000	0.032648	0.069106	0.80403	-	-	-	*
		24.00000	4.00000	71.60000	0.25485	0.35510	1.0454	-	-	-	*
		26.00000	4.00000	71.60000	0.49365	0.70270	1.3815	-	-	-	*
		28.00000	4.00000	71.60000	0.64542	1.2461	1.8895	-	-	-	*
		30.00000	4.00000	71.60000	0.79061	1.4842	2.3371	-	-	-	*
		32.00000	4.00000	71.60000	0.92865	1.7943	2.7245	-	-	-	*
		34.00000	4.00000	71.60000	1.1835	2.3969	2.8912	-	-	-	*
		36.00000	4.00000	71.60000	1.3252	3.1278	3.0858	-	-	-	*
		38.00000	4.00000	71.60000	1.1770	3.6977	3.2609	-	-	-	*
		40.00000	4.00000	71.60000	0.83077	4.1715	3.4283	-	-	-	*
		42.00000	4.00000	71.60000	0.32376	4.4553	3.5565	-	-	-	*
		44.00000	4.00000	71.60000	0.12322	5.7090	4.1557	-	-	-	*
		46.00000	4.00000	71.60000	0.12340	5.7253	4.1775	-	-	-	*
		48.00000	4.00000	71.60000	0.12359	5.7417	4.1994	-	-	-	*
		50.00000	4.00000	71.60000	0.12378	5.7582	4.2213	-	-	-	*
		52.00000	4.00000	71.60000	0.12396	5.7747	4.2432	-	-	-	*
		54.00000	4.00000	71.60000	0.12415	5.7912	4.2651	-	-	-	*
		56.00000	4.00000	71.60000	-0.034826	4.3184	3.6375	-	-	-	*
		58.00000	4.00000	71.60000	-0.67860	4.0070	3.4882	-	-	-	*
		60.00000	4.00000	71.60000	-1.1430	3.4568	3.2037	-	-	-	*
		62.00000	4.00000	71.60000	-1.3626	2.7699	2.8186	-	-	-	*
		64.00000	4.00000	71.60000	-1.3336	2.0416	2.3703	-	-	-	*
		66.00000	4.00000	71.60000	-1.0868	1.3343	1.8935	-	-	-	*
		68.00000	4.00000	71.60000	-0.86602	0.88749	1.4153	-	-	-	*
		70.00000	4.00000	71.60000	-0.75246	0.66174	0.96006	-	-	-	*
		0.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	6.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	6.00000	71.60000	0.0	0.0	0.28059	-	-	-	*
		18.00000	6.00000	71.60000	0.0	0.0	0.63863	-	-	-	*
		20.00000	6.00000	71.60000	0.12435	0.16632	0.99109	-	-	-	*
		22.00000	6.00000	71.60000	0.39388	0.61916	1.3083	-	-	-	*
		24.00000	6.00000	71.60000	0.80081	1.3238	1.6315	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		26.00000	6.00000	71.60000	0.95341	1.9336	2.2821	-	-	- *
		28.00000	6.00000	71.60000	0.92828	2.8036	2.9282	-	-	- *
		30.00000	6.00000	71.60000	1.1010	3.0582	3.3838	-	-	- *
		32.00000	6.00000	71.60000	1.4705	3.5885	3.5511	-	-	- *
		34.00000	6.00000	71.60000	1.8094	4.3091	3.7736	-	-	- *
		36.00000	6.00000	71.60000	1.8261	4.9412	4.0164	-	-	- *
		38.00000	6.00000	71.60000	1.4830	5.3019	4.2644	-	-	- *
		40.00000	6.00000	71.60000	1.0104	5.6606	4.4785	-	-	- *
		42.00000	6.00000	71.60000	0.40292	5.9541	4.6430	-	-	- *
		44.00000	6.00000	71.60000	0.14040	7.2290	5.4619	-	-	- *
		46.00000	6.00000	71.60000	0.14063	7.2471	5.4829	-	-	- *
		48.00000	6.00000	71.60000	0.14085	7.2652	5.5038	-	-	- *
		50.00000	6.00000	71.60000	0.14108	7.2833	5.5246	-	-	- *
		52.00000	6.00000	71.60000	0.14130	7.3015	5.5453	-	-	- *
		54.00000	6.00000	71.60000	0.14153	7.3197	5.5658	-	-	- *
		56.00000	6.00000	71.60000	-0.053798	5.5950	4.6630	-	-	- *
		58.00000	6.00000	71.60000	-1.0400	5.1506	4.4495	-	-	- *
		60.00000	6.00000	71.60000	-1.7287	4.3849	4.0752	-	-	- *
		62.00000	6.00000	71.60000	-2.0415	3.4805	3.5868	-	-	- *
		64.00000	6.00000	71.60000	-2.0120	2.5833	3.0315	-	-	- *
		66.00000	6.00000	71.60000	-1.7190	1.7701	2.4513	-	-	- *
		68.00000	6.00000	71.60000	-1.3225	1.1367	1.9081	-	-	- *
		70.00000	6.00000	71.60000	-1.0360	0.76411	1.3668	-	-	- *
		0.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	8.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	8.00000	71.60000	0.0	0.0	0.17924	-	-	- *
		16.00000	8.00000	71.60000	0.0	0.0	0.59451	-	-	- *
		18.00000	8.00000	71.60000	0.16562	0.14409	1.0182	-	-	- *
		20.00000	8.00000	71.60000	0.59199	0.64378	1.4127	-	-	- *
		22.00000	8.00000	71.60000	1.1471	1.4147	1.8482	-	-	- *
		24.00000	8.00000	71.60000	1.5269	2.2971	2.5117	-	-	- *
		26.00000	8.00000	71.60000	1.5239	3.1059	3.3134	-	-	- *
		28.00000	8.00000	71.60000	1.2327	4.3453	4.2347	-	-	- *
		30.00000	8.00000	71.60000	1.6762	4.7613	4.4852	-	-	- *
		32.00000	8.00000	71.60000	2.1989	5.3833	4.7127	-	-	- *
		34.00000	8.00000	71.60000	2.2816	5.8507	4.9324	-	-	- *
		36.00000	8.00000	71.60000	2.0800	6.2238	5.2164	-	-	- *
		38.00000	8.00000	71.60000	1.7610	6.6761	5.4686	-	-	- *
		40.00000	8.00000	71.60000	1.2488	7.1488	5.6722	-	-	- *
		42.00000	8.00000	71.60000	0.51724	7.5439	5.8410	-	-	- *
		44.00000	8.00000	71.60000	0.15936	8.8509	6.7895	-	-	- *
		46.00000	8.00000	71.60000	0.15961	8.8708	6.8052	-	-	- *
		48.00000	8.00000	71.60000	0.15987	8.8908	6.8207	-	-	- *
		50.00000	8.00000	71.60000	0.16013	8.9107	6.8361	-	-	- *
		52.00000	8.00000	71.60000	0.16038	8.9307	6.8512	-	-	- *
		54.00000	8.00000	71.60000	0.16064	8.9507	6.8661	-	-	- *
		56.00000	8.00000	71.60000	-0.083008	6.9727	5.6870	-	-	- *
		58.00000	8.00000	71.60000	-1.5770	6.3078	5.3905	-	-	- *
		60.00000	8.00000	71.60000	-2.5381	5.2001	4.9151	-	-	- *
		62.00000	8.00000	71.60000	-2.8999	3.9934	4.3195	-	-	- *
		64.00000	8.00000	71.60000	-2.7973	2.9009	3.6581	-	-	- *
		66.00000	8.00000	71.60000	-2.5350	2.1084	3.0506	-	-	- *
		68.00000	8.00000	71.60000	-2.0413	1.4171	2.4038	-	-	- *
		70.00000	8.00000	71.60000	-1.3737	0.81836	1.7661	-	-	- *
		0.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	10.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	10.00000	71.60000	0.0	0.0	0.41984	-	-	- *
		16.00000	10.00000	71.60000	0.11942	0.066674	0.88770	-	-	- *
		18.00000	10.00000	71.60000	0.64892	0.43478	1.3539	-	-	- *
		20.00000	10.00000	71.60000	1.2538	1.0500	1.8417	-	-	- *
		22.00000	10.00000	71.60000	2.0347	1.9502	2.4276	-	-	- *
		24.00000	10.00000	71.60000	2.4673	3.0778	3.4521	-	-	- *
		26.00000	10.00000	71.60000	2.2876	4.2237	4.4603	-	-	- *
		28.00000	10.00000	71.60000	1.5476	5.9265	5.6248	-	-	- *
		30.00000	10.00000	71.60000	2.3816	6.4720	5.8878	-	-	- *
		32.00000	10.00000	71.60000	2.8357	6.9784	6.1638	-	-	- *
		34.00000	10.00000	71.60000	2.6652	7.2396	6.4339	-	-	- *
		36.00000	10.00000	71.60000	2.4001	7.5483	6.5872	-	-	- *
		38.00000	10.00000	71.60000	2.1261	8.0732	6.7635	-	-	- *
		40.00000	10.00000	71.60000	1.5946	8.6955	6.9001	-	-	- *
		42.00000	10.00000	71.60000	0.69226	9.2556	7.0349	-	-	- *
		44.00000	10.00000	71.60000	0.18020	10.617	7.9702	-	-	- *
		46.00000	10.00000	71.60000	0.18048	10.639	7.9777	-	-	- *
		48.00000	10.00000	71.60000	0.18076	10.661	7.9850	-	-	- *
		50.00000	10.00000	71.60000	0.18104	10.682	7.9922	-	-	- *
		52.00000	10.00000	71.60000	0.18132	10.704	7.9991	-	-	- *
		54.00000	10.00000	71.60000	0.18160	10.726	8.0057	-	-	- *
		56.00000	10.00000	71.60000	-0.13269	8.4919	6.6043	-	-	- *
		58.00000	10.00000	71.60000	-2.4346	7.4198	6.2042	-	-	- *
		60.00000	10.00000	71.60000	-3.6850	5.7522	5.6278	-	-	- *
		62.00000	10.00000	71.60000	-3.9668	4.1618	4.9380	-	-	- *
		64.00000	10.00000	71.60000	-3.8883	3.0722	4.3398	-	-	- *
		66.00000	10.00000	71.60000	-3.4525	2.1877	3.6310	-	-	- *
		68.00000	10.00000	71.60000	-2.7947	1.4782	2.8761	-	-	- *
		70.00000	10.00000	71.60000	-1.9957	0.90585	2.1384	-	-	- *
		0.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	12.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	12.00000	71.60000	0.0	0.0	0.13099	-	-	- *
		14.00000	12.00000	71.60000	0.0	0.0	0.60803	-	-	- *
		16.00000	12.00000	71.60000	0.31405	0.12300	1.1226	-	-	- *
		18.00000	12.00000	71.60000	1.2378	0.58178	1.6548	-	-	- *
		20.00000	12.00000	71.60000	2.1284	1.2126	2.2975	-	-	- *
		22.00000	12.00000	71.60000	3.1359	2.1511	3.1211	-	-	- *
		24.00000	12.00000	71.60000	3.7201	3.4635	4.3276	-	-	- *
		26.00000	12.00000	71.60000	3.4351	5.1864	5.5602	-	-	- *
		28.00000	12.00000	71.60000	2.0853	7.6779	7.0238	-	-	- *
		30.00000	12.00000	71.60000	2.9551	8.1059	7.3314	-	-	- *
		32.00000	12.00000	71.60000	3.2032	8.4175	7.6735	-	-	- *
		34.00000	12.00000	71.60000	3.1078	8.6796	7.9518	-	-	- *
		36.00000	12.00000	71.60000	2.9419	9.0311	8.0488	-	-	- *
		38.00000	12.00000	71.60000	2.5969	9.4774	7.9479	-	-	- *
		40.00000	12.00000	71.60000	2.1000	10.243	7.9429	-	-	- *
		42.00000	12.00000	71.60000	0.99041	11.097	8.0049	-	-	- *
		44.00000	12.00000	71.60000	0.20304	12.569	8.7882	-	-	- *
		46.00000	12.00000	71.60000	0.20333	12.593	8.7864	-	-	- *
		48.00000	12.00000	71.60000	0.20363	12.617	8.7844	-	-	- *
		50.00000	12.00000	71.60000	0.20393	12.640	8.7822	-	-	- *
		52.00000	12.00000	71.60000	0.20422	12.664	8.7799	-	-	- *
		54.00000	12.00000	71.60000	0.20452	12.688	8.7775	-	-	- *
		56.00000	12.00000	71.60000	-0.23159	10.190	7.2761	-	-	- *
		58.00000	12.00000	71.60000	-3.9284	8.2310	6.7519	-	-	- *
		60.00000	12.00000	71.60000	-5.2832	5.6698	6.1010	-	-	- *
		62.00000	12.00000	71.60000	-5.5540	4.0062	5.6390	-	-	- *
		64.00000	12.00000	71.60000	-5.1411	2.7927	4.9663	-	-	- *
		66.00000	12.00000	71.60000	-4.4048	1.9189	4.1509	-	-	- *
		68.00000	12.00000	71.60000	-3.5233	1.2812	3.2898	-	-	- *
		70.00000	12.00000	71.60000	-2.5639	0.80009	2.4571	-	-	- *
		0.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	14.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	14.00000	71.60000	0.0	0.0	0.24345	-	-	- *
		14.00000	14.00000	71.60000	0.032653	0.0062974	0.74398	-	-	- *
		16.00000	14.00000	71.60000	0.68158	0.15336	1.2881	-	-	- *
		18.00000	14.00000	71.60000	1.7567	0.47430	1.8961	-	-	- *

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		20.00000	14.00000	71.60000	2.9761	0.96498	2.6865	-	-	-	*
		22.00000	14.00000	71.60000	4.4096	1.7737	3.7693	-	-	-	*
		24.00000	14.00000	71.60000	5.4924	3.1087	5.0972	-	-	-	*
		26.00000	14.00000	71.60000	5.4223	5.4359	6.3193	-	-	-	*
		28.00000	14.00000	71.60000	2.5258	9.5236	8.0358	-	-	-	*
		30.00000	14.00000	71.60000	3.3910	9.7917	8.3789	-	-	-	*
		32.00000	14.00000	71.60000	3.5404	9.9738	8.7648	-	-	-	*
		34.00000	14.00000	71.60000	3.5520	10.185	9.0337	-	-	-	*
		36.00000	14.00000	71.60000	3.5334	10.490	9.0685	-	-	-	*
		38.00000	14.00000	71.60000	3.3821	10.945	8.8609	-	-	-	*
		40.00000	14.00000	71.60000	2.8527	11.629	8.5011	-	-	-	*
		42.00000	14.00000	71.60000	1.6092	12.960	8.4195	-	-	-	*
		44.00000	14.00000	71.60000	0.22798	14.749	8.9808	-	-	-	*
		46.00000	14.00000	71.60000	0.22829	14.775	8.9700	-	-	-	*
		48.00000	14.00000	71.60000	0.22860	14.801	8.9592	-	-	-	*
		50.00000	14.00000	71.60000	0.22891	14.827	8.9484	-	-	-	*
		52.00000	14.00000	71.60000	0.22921	14.853	8.9376	-	-	-	*
		54.00000	14.00000	71.60000	0.22952	14.879	8.9267	-	-	-	*
		56.00000	14.00000	71.60000	-0.50365	12.087	7.5283	-	-	-	*
		58.00000	14.00000	71.60000	-6.7011	7.6584	6.8665	-	-	-	*
		60.00000	14.00000	71.60000	-7.8825	4.6141	6.7314	-	-	-	*
		62.00000	14.00000	71.60000	-7.3532	2.8931	6.2503	-	-	-	*
		64.00000	14.00000	71.60000	-6.3541	1.8827	5.4804	-	-	-	*
		66.00000	14.00000	71.60000	-5.2476	1.2470	4.5618	-	-	-	*
		68.00000	14.00000	71.60000	-4.1299	0.81915	3.6059	-	-	-	*
		70.00000	14.00000	71.60000	-3.0155	0.51327	2.6931	-	-	-	*
		0.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	16.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	16.00000	71.60000	0.0	0.0	0.29617	-	-	-	*
		14.00000	16.00000	71.60000	0.093796	0.0046898	0.81435	-	-	-	*
		16.00000	16.00000	71.60000	0.89108	0.051980	1.3722	-	-	-	*
		18.00000	16.00000	71.60000	2.0802	0.14562	2.0321	-	-	-	*
		20.00000	16.00000	71.60000	3.5449	0.29748	2.9249	-	-	-	*
		22.00000	16.00000	71.60000	5.3917	0.56895	4.1898	-	-	-	*
		24.00000	16.00000	71.60000	7.3543	1.1188	5.6986	-	-	-	*
		26.00000	16.00000	71.60000	9.1327	2.6677	6.8586	-	-	-	*
		28.00000	16.00000	71.60000	2.8121	11.569	7.9909	-	-	-	*
		30.00000	16.00000	71.60000	3.6898	11.662	8.3541	-	-	-	*
		32.00000	16.00000	71.60000	3.8078	11.732	8.7626	-	-	-	*
		34.00000	16.00000	71.60000	3.9033	11.817	9.0291	-	-	-	*
		36.00000	16.00000	71.60000	4.0209	11.938	9.0306	-	-	-	*
		38.00000	16.00000	71.60000	4.1201	12.130	8.7578	-	-	-	*
		40.00000	16.00000	71.60000	4.1164	12.510	8.3113	-	-	-	*
		42.00000	16.00000	71.60000	3.4163	13.731	7.8681	-	-	-	*
		44.00000	16.00000	71.60000	0.25515	17.199	8.2379	-	-	-	*
		46.00000	16.00000	71.60000	0.25546	17.228	8.2204	-	-	-	*
		48.00000	16.00000	71.60000	0.25578	17.256	8.2030	-	-	-	*
		50.00000	16.00000	71.60000	0.25609	17.284	8.1857	-	-	-	*
		52.00000	16.00000	71.60000	0.25640	17.313	8.1687	-	-	-	*
		54.00000	16.00000	71.60000	0.25671	17.341	8.1518	-	-	-	*
		56.00000	16.00000	71.60000	-3.3731	13.492	7.0750	-	-	-	*
		58.00000	16.00000	71.60000	-11.942	2.2747	7.4190	-	-	-	*
		60.00000	16.00000	71.60000	-10.321	1.0070	7.2953	-	-	-	*
		62.00000	16.00000	71.60000	-8.6717	0.56864	6.6985	-	-	-	*
		64.00000	16.00000	71.60000	-7.1609	0.35362	5.8225	-	-	-	*
		66.00000	16.00000	71.60000	-5.7815	0.22897	4.8146	-	-	-	*
		68.00000	16.00000	71.60000	-4.5019	0.14882	3.7872	-	-	-	*
		70.00000	16.00000	71.60000	-3.2843	0.093171	2.8197	-	-	-	*
		0.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	18.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	18.00000	71.60000	0.0	0.0	0.29579	-	-	-	*
		14.00000	18.00000	71.60000	0.14360	-0.0020369	0.82437	-	-	-	*
		16.00000	18.00000	71.60000	1.2045	-0.017085	1.4142	-	-	-	*
		18.00000	18.00000	71.60000	2.6639	-0.037786	2.1632	-	-	-	*
		20.00000	18.00000	71.60000	4.5238	-0.061797	3.2766	-	-	-	*
		22.00000	18.00000	71.60000	6.9345	-0.090673	4.8617	-	-	-	*
		24.00000	18.00000	71.60000	9.5492	-0.12244	6.7087	-	-	-	*
		26.00000	18.00000	71.60000	12.437	-0.15808	8.1016	-	-	-	*
		28.00000	18.00000	71.60000	16.155	-0.20203	7.9053	-	-	-	*
		30.00000	18.00000	71.60000	Point lies within an excavation.						*
		32.00000	18.00000	71.60000	Point lies within an excavation.						*
		34.00000	18.00000	71.60000	Point lies within an excavation.						*
		36.00000	18.00000	71.60000	Point lies within an excavation.						*
		38.00000	18.00000	71.60000	Point lies within an excavation.						*
		40.00000	18.00000	71.60000	Point lies within an excavation.						*
		42.00000	18.00000	71.60000	Point lies within an excavation.						*
		44.00000	18.00000	71.60000	Point lies within an excavation.						*
		46.00000	18.00000	71.60000	Point lies within an excavation.						*
		48.00000	18.00000	71.60000	Point lies within an excavation.						*
		50.00000	18.00000	71.60000	Point lies within an excavation.						*
		52.00000	18.00000	71.60000	Point lies within an excavation.						*
		54.00000	18.00000	71.60000	Point lies within an excavation.						*
		56.00000	18.00000	71.60000	-17.780	0.12521	7.9097	-	-	-	*
		58.00000	18.00000	71.60000	-15.270	0.10754	8.8638	-	-	-	*
		60.00000	18.00000	71.60000	-13.038	0.091815	8.8451	-	-	-	*
		62.00000	18.00000	71.60000	-11.041	0.077751	8.1609	-	-	-	*
		64.00000	18.00000	71.60000	-9.2368	0.065048	7.0714	-	-	-	*
		66.00000	18.00000	71.60000	-7.5843	0.053410	5.7898	-	-	-	*
		68.00000	18.00000	71.60000	-6.0409	0.042542	4.4823	-	-	-	*
		70.00000	18.00000	71.60000	-4.5646	0.032145	3.2681	-	-	-	*
		0.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	20.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	20.00000	71.60000	0.0	0.0	0.28870	-	-	-	*
		14.00000	20.00000	71.60000	0.13296	-0.0018860	0.81566	-	-	-	*
		16.00000	20.00000	71.60000	1.1839	-0.016793	1.4054	-	-	-	*
		18.00000	20.00000	71.60000	2.6429	-0.037488	2.1506	-	-	-	*
		20.00000	20.00000	71.60000	4.4961	-0.061441	3.2589	-	-	-	*
		22.00000	20.00000	71.60000	6.9044	-0.090283	4.8388	-	-	-	*
		24.00000	20.00000	71.60000	9.5157	-0.12200	6.6890	-	-	-	*
		26.00000	20.00000	71.60000	12.399	-0.15758	8.0969	-	-	-	*
		28.00000	20.00000	71.60000	16.107	-0.20142	7.9238	-	-	-	*
		30.00000	20.00000	71.60000	Point lies within an excavation.						*
		32.00000	20.00000	71.60000	Point lies within an excavation.						*
		34.00000	20.00000	71.60000	Point lies within an excavation.						*
		36.00000	20.00000	71.60000	Point lies within an excavation.						*
		38.00000	20.00000	71.60000	Point lies within an excavation.						*
		40.00000	20.00000	71.60000	Point lies within an excavation.						*
		42.00000	20.00000	71.60000	Point lies within an excavation.						*
		44.00000	20.00000	71.60000	Point lies within an excavation.						*
		46.00000	20.00000	71.60000	Point lies within an excavation.						*
		48.00000	20.00000	71.60000	Point lies within an excavation.						*
		50.00000	20.00000	71.60000	Point lies within an excavation.						*
		52.00000	20.00000	71.60000	Point lies within an excavation.						*
		54.00000	20.00000	71.60000	Point lies within an excavation.						*
		56.00000	20.00000	71.60000	-17.799	0.12534	7.8987	-	-	-	*
		58.00000	20.00000	71.60000	-15.287	0.10765	8.8609	-	-	-	*
		60.00000	20.00000	71.60000	-13.053	0.091919	8.8479	-	-	-	*
		62.00000	20.00000	71.60000	-11.054	0.077844	8.1674	-	-	-	*
		64.00000	20.00000	71.60000	-9.2489	0.065133	7.0799	-	-	-	*
		66.00000	20.00000	71.60000	-7.5955	0.053489	5.7991	-	-	-	*
		68.00000	20.00000	71.60000	-6.0515	0.042616	4.4913	-	-	-	*
		70.00000	20.00000	71.60000	-4.5749	0.032217	3.2762	-	-	-	*
		0.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	22.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	22.00000	71.60000	0.0	0.0	0.28161	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		14.00000	22.00000	71.60000	0.12233	-0.0017351	0.80691	-	-	-	*
		16.00000	22.00000	71.60000	1.1634	-0.016502	1.3965	-	-	-	*
		18.00000	22.00000	71.60000	2.6219	-0.037190	2.1380	-	-	-	*
		20.00000	22.00000	71.60000	4.4683	-0.061086	3.2413	-	-	-	*
		22.00000	22.00000	71.60000	6.8743	-0.089894	4.8160	-	-	-	*
		24.00000	22.00000	71.60000	9.4822	-0.12157	6.6693	-	-	-	*
		26.00000	22.00000	71.60000	12.361	-0.15708	8.0921	-	-	-	*
		28.00000	22.00000	71.60000	16.059	-0.20082	7.9419	-	-	-	*
		30.00000	22.00000	71.60000	Point lies within an excavation.						*
		32.00000	22.00000	71.60000	Point lies within an excavation.						*
		34.00000	22.00000	71.60000	Point lies within an excavation.						*
		36.00000	22.00000	71.60000	Point lies within an excavation.						*
		38.00000	22.00000	71.60000	Point lies within an excavation.						*
		40.00000	22.00000	71.60000	Point lies within an excavation.						*
		42.00000	22.00000	71.60000	Point lies within an excavation.						*
		44.00000	22.00000	71.60000	Point lies within an excavation.						*
		46.00000	22.00000	71.60000	Point lies within an excavation.						*
		48.00000	22.00000	71.60000	Point lies within an excavation.						*
		50.00000	22.00000	71.60000	Point lies within an excavation.						*
		52.00000	22.00000	71.60000	Point lies within an excavation.						*
		54.00000	22.00000	71.60000	Point lies within an excavation.						*
		56.00000	22.00000	71.60000	-17.818	0.12548	7.8877	-	-	-	*
		58.00000	22.00000	71.60000	-15.304	0.10777	8.8579	-	-	-	*
		60.00000	22.00000	71.60000	-13.067	0.092024	8.8507	-	-	-	*
		62.00000	22.00000	71.60000	-11.067	0.077938	8.1739	-	-	-	*
		64.00000	22.00000	71.60000	-9.2611	0.065219	7.0885	-	-	-	*
		66.00000	22.00000	71.60000	-7.6067	0.053568	5.8083	-	-	-	*
		68.00000	22.00000	71.60000	-6.0621	0.042691	4.5003	-	-	-	*
		70.00000	22.00000	71.60000	-4.5851	0.032290	3.2842	-	-	-	*
		0.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	24.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	24.00000	71.60000	0.0	0.0	0.27452	-	-	-	*
		14.00000	24.00000	71.60000	0.11169	-0.0015843	0.79813	-	-	-	*
		16.00000	24.00000	71.60000	1.1428	-0.016210	1.3877	-	-	-	*
		18.00000	24.00000	71.60000	2.6009	-0.036892	2.1255	-	-	-	*
		20.00000	24.00000	71.60000	4.4407	-0.060731	3.2237	-	-	-	*
		22.00000	24.00000	71.60000	6.8442	-0.089505	4.7932	-	-	-	*
		24.00000	24.00000	71.60000	9.4488	-0.12113	6.6495	-	-	-	*
		26.00000	24.00000	71.60000	12.323	-0.15658	8.0869	-	-	-	*
		28.00000	24.00000	71.60000	16.011	-0.20021	7.9595	-	-	-	*
		30.00000	24.00000	71.60000	Point lies within an excavation.						*
		32.00000	24.00000	71.60000	Point lies within an excavation.						*
		34.00000	24.00000	71.60000	Point lies within an excavation.						*
		36.00000	24.00000	71.60000	Point lies within an excavation.						*
		38.00000	24.00000	71.60000	Point lies within an excavation.						*
		40.00000	24.00000	71.60000	Point lies within an excavation.						*
		42.00000	24.00000	71.60000	Point lies within an excavation.						*
		44.00000	24.00000	71.60000	Point lies within an excavation.						*
		46.00000	24.00000	71.60000	Point lies within an excavation.						*
		48.00000	24.00000	71.60000	Point lies within an excavation.						*
		50.00000	24.00000	71.60000	Point lies within an excavation.						*
		52.00000	24.00000	71.60000	Point lies within an excavation.						*
		54.00000	24.00000	71.60000	Point lies within an excavation.						*
		56.00000	24.00000	71.60000	-17.837	0.12561	7.8766	-	-	-	*
		58.00000	24.00000	71.60000	-15.320	0.10789	8.8549	-	-	-	*
		60.00000	24.00000	71.60000	-13.082	0.092129	8.8534	-	-	-	*
		62.00000	24.00000	71.60000	-11.081	0.078033	8.1804	-	-	-	*
		64.00000	24.00000	71.60000	-9.2732	0.065304	7.0970	-	-	-	*
		66.00000	24.00000	71.60000	-7.6179	0.053647	5.8176	-	-	-	*
		68.00000	24.00000	71.60000	-6.0727	0.042765	4.5093	-	-	-	*
		70.00000	24.00000	71.60000	-4.5954	0.032362	3.2922	-	-	-	*
		0.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	26.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	26.00000	71.60000	0.0	0.0	0.26743	-	-	-	*
		14.00000	26.00000	71.60000	0.10105	-0.0014334	0.78930	-	-	-	*
		16.00000	26.00000	71.60000	1.1223	-0.015919	1.3789	-	-	-	*
		18.00000	26.00000	71.60000	2.5800	-0.036595	2.1130	-	-	-	*
		20.00000	26.00000	71.60000	4.4130	-0.060376	3.2061	-	-	-	*
		22.00000	26.00000	71.60000	6.8142	-0.089117	4.7703	-	-	-	*
		24.00000	26.00000	71.60000	9.4155	-0.12070	6.6295	-	-	-	*
		26.00000	26.00000	71.60000	12.286	-0.15609	8.0816	-	-	-	*
		28.00000	26.00000	71.60000	15.963	-0.19960	7.9767	-	-	-	*
		30.00000	26.00000	71.60000	Point lies within an excavation.						*
		32.00000	26.00000	71.60000	Point lies within an excavation.						*
		34.00000	26.00000	71.60000	Point lies within an excavation.						*
		36.00000	26.00000	71.60000	Point lies within an excavation.						*
		38.00000	26.00000	71.60000	Point lies within an excavation.						*
		40.00000	26.00000	71.60000	Point lies within an excavation.						*
		42.00000	26.00000	71.60000	Point lies within an excavation.						*
		44.00000	26.00000	71.60000	Point lies within an excavation.						*
		46.00000	26.00000	71.60000	Point lies within an excavation.						*
		48.00000	26.00000	71.60000	Point lies within an excavation.						*
		50.00000	26.00000	71.60000	Point lies within an excavation.						*
		52.00000	26.00000	71.60000	Point lies within an excavation.						*
		54.00000	26.00000	71.60000	Point lies within an excavation.						*
		56.00000	26.00000	71.60000	-17.855	0.12574	7.8654	-	-	-	*
		58.00000	26.00000	71.60000	-15.337	0.10801	8.8518	-	-	-	*
		60.00000	26.00000	71.60000	-13.097	0.092233	8.8561	-	-	-	*
		62.00000	26.00000	71.60000	-11.094	0.078127	8.1868	-	-	-	*
		64.00000	26.00000	71.60000	-9.2853	0.065390	7.1056	-	-	-	*
		66.00000	26.00000	71.60000	-7.6291	0.053726	5.8269	-	-	-	*
		68.00000	26.00000	71.60000	-6.0833	0.042840	4.5183	-	-	-	*
		70.00000	26.00000	71.60000	-4.6057	0.032434	3.3003	-	-	-	*
		0.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	28.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	28.00000	71.60000	0.0	0.0	0.26034	-	-	-	*
		14.00000	28.00000	71.60000	0.090419	-0.0012825	0.78043	-	-	-	*
		16.00000	28.00000	71.60000	1.1017	-0.015627	1.3702	-	-	-	*
		18.00000	28.00000	71.60000	2.5590	-0.036298	2.1006	-	-	-	*
		20.00000	28.00000	71.60000	4.3854	-0.060022	3.1887	-	-	-	*
		22.00000	28.00000	71.60000	6.7842	-0.088730	4.7475	-	-	-	*
		24.00000	28.00000	71.60000	9.3822	-0.12026	6.6095	-	-	-	*
		26.00000	28.00000	71.60000	12.248	-0.15559	8.0760	-	-	-	*
		28.00000	28.00000	71.60000	15.915	-0.19900	7.9935	-	-	-	*
		30.00000	28.00000	71.60000	Point lies within an excavation.						*
		32.00000	28.00000	71.60000	Point lies within an excavation.						*
		34.00000	28.00000	71.60000	Point lies within an excavation.						*
		36.00000	28.00000	71.60000	Point lies within an excavation.						*
		38.00000	28.00000	71.60000	Point lies within an excavation.						*
		40.00000	28.00000	71.60000	Point lies within an excavation.						*
		42.00000	28.00000	71.60000	Point lies within an excavation.						*
		44.00000	28.00000	71.60000	Point lies within an excavation.						*
		46.00000	28.00000	71.60000	Point lies within an excavation.						*
		48.00000	28.00000	71.60000	Point lies within an excavation.						*
		50.00000	28.00000	71.60000	Point lies within an excavation.						*
		52.00000	28.00000	71.60000	Point lies within an excavation.						*
		54.00000	28.00000	71.60000	Point lies within an excavation.						*
		56.00000	28.00000	71.60000	-17.874	0.12587	7.8541	-	-	-	*
		58.00000	28.00000	71.60000	-15.354	0.10812	8.8487	-	-	-	*
		60.00000	28.00000	71.60000	-13.112	0.092338	8.8588	-	-	-	*
		62.00000	28.00000	71.60000	-11.107	0.078221	8.1933	-	-	-	*
		64.00000	28.00000	71.60000	-9.2975	0.065475	7.1141	-	-	-	*
		66.00000	28.00000	71.60000	-7.6404	0.053805	5.8362	-	-	-	*
		68.00000	28.00000	71.60000	-6.0939	0.042915	4.5273	-	-	-	*
		70.00000	28.00000	71.60000	-4.6159	0.032506	3.3084	-	-	-	*
		0.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		8.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	30.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	30.00000	71.60000	0.0	0.0	0.25324	-	-	-	*
		14.00000	30.00000	71.60000	0.079782	-0.0011317	0.77151	-	-	-	*
		16.00000	30.00000	71.60000	1.0811	-0.015335	1.3615	-	-	-	*
		18.00000	30.00000	71.60000	2.5381	-0.036001	2.0882	-	-	-	*
		20.00000	30.00000	71.60000	4.3577	-0.059668	3.1712	-	-	-	*
		22.00000	30.00000	71.60000	6.7543	-0.088343	4.7246	-	-	-	*
		24.00000	30.00000	71.60000	9.3489	-0.11983	6.5894	-	-	-	*
		26.00000	30.00000	71.60000	12.210	-0.15510	8.0702	-	-	-	*
		28.00000	30.00000	71.60000	15.868	-0.19839	8.0098	-	-	-	*
		30.00000	30.00000	71.60000	Point lies within an excavation.						*
		32.00000	30.00000	71.60000	Point lies within an excavation.						*
		34.00000	30.00000	71.60000	Point lies within an excavation.						*
		36.00000	30.00000	71.60000	Point lies within an excavation.						*
		38.00000	30.00000	71.60000	Point lies within an excavation.						*
		40.00000	30.00000	71.60000	Point lies within an excavation.						*
		42.00000	30.00000	71.60000	Point lies within an excavation.						*
		44.00000	30.00000	71.60000	Point lies within an excavation.						*
		46.00000	30.00000	71.60000	Point lies within an excavation.						*
		48.00000	30.00000	71.60000	Point lies within an excavation.						*
		50.00000	30.00000	71.60000	Point lies within an excavation.						*
		52.00000	30.00000	71.60000	Point lies within an excavation.						*
		54.00000	30.00000	71.60000	Point lies within an excavation.						*
		56.00000	30.00000	71.60000	-17.893	0.12601	7.8428	-	-	-	*
		58.00000	30.00000	71.60000	-15.370	0.10824	8.8455	-	-	-	*
		60.00000	30.00000	71.60000	-13.127	0.092443	8.8614	-	-	-	*
		62.00000	30.00000	71.60000	-11.121	0.078315	8.1997	-	-	-	*
		64.00000	30.00000	71.60000	-9.3097	0.065561	7.1226	-	-	-	*
		66.00000	30.00000	71.60000	-7.6516	0.053884	5.8455	-	-	-	*
		68.00000	30.00000	71.60000	-6.1045	0.042989	4.5363	-	-	-	*
		70.00000	30.00000	71.60000	-4.6262	0.032579	3.3164	-	-	-	*
		0.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	32.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	32.00000	71.60000	0.0	0.0	0.23890	-	-	-	*
		14.00000	32.00000	71.60000	0.036635	-0.0030959	0.74658	-	-	-	*
		16.00000	32.00000	71.60000	0.74747	-0.073522	1.3035	-	-	-	*
		18.00000	32.00000	71.60000	1.9208	-0.22598	1.9403	-	-	-	*
		20.00000	32.00000	71.60000	3.3155	-0.46730	2.7967	-	-	-	*
		22.00000	32.00000	71.60000	5.0781	-0.88985	4.0025	-	-	-	*
		24.00000	32.00000	71.60000	6.8595	-1.6994	5.4918	-	-	-	*
		26.00000	32.00000	71.60000	8.1205	-3.6441	6.6830	-	-	-	*
		28.00000	32.00000	71.60000	4.0485	-9.0744	7.2818	-	-	-	*
		30.00000	32.00000	71.60000	3.3877	-11.122	8.4879	-	-	-	*
		32.00000	32.00000	71.60000	3.5396	-11.177	8.9000	-	-	-	*
		34.00000	32.00000	71.60000	3.6173	-11.254	9.1830	-	-	-	*
		36.00000	32.00000	71.60000	3.7085	-11.385	9.2110	-	-	-	*
		38.00000	32.00000	71.60000	3.7585	-11.622	8.9698	-	-	-	*
		40.00000	32.00000	71.60000	3.6314	-12.110	8.5525	-	-	-	*
		42.00000	32.00000	71.60000	2.5471	-13.326	8.1232	-	-	-	*
		44.00000	32.00000	71.60000	-0.16320	-16.210	8.6058	-	-	-	*
		46.00000	32.00000	71.60000	-0.16306	-16.192	8.6151	-	-	-	*
		48.00000	32.00000	71.60000	-0.16293	-16.173	8.6244	-	-	-	*
		50.00000	32.00000	71.60000	-0.16279	-16.155	8.6337	-	-	-	*
		52.00000	32.00000	71.60000	-0.16265	-16.137	8.6431	-	-	-	*
		54.00000	32.00000	71.60000	-0.16251	-16.119	8.6525	-	-	-	*
		56.00000	32.00000	71.60000	-0.16237	-16.101	8.6620	-	-	-	*
		58.00000	32.00000	71.60000	-9.1063	-6.3744	7.0547	-	-	-	*
		60.00000	32.00000	71.60000	-9.3357	-3.2675	7.0488	-	-	-	*
		62.00000	32.00000	71.60000	-8.2087	-1.9154	6.5433	-	-	-	*
		64.00000	32.00000	71.60000	-6.9128	-1.2097	5.7344	-	-	-	*
		66.00000	32.00000	71.60000	-5.6434	-0.79008	4.7727	-	-	-	*
		68.00000	32.00000	71.60000	-4.4287	-0.51668	3.7743	-	-	-	*
		70.00000	32.00000	71.60000	-3.2536	-0.32536	2.8233	-	-	-	*
		0.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	34.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	34.00000	71.60000	0.0	0.0	0.17174	-	-	-	*
		14.00000	34.00000	71.60000	0.0	0.0	0.66098	-	-	-	*
		16.00000	34.00000	71.60000	0.50036	-0.13124	1.2009	-	-	-	*
		18.00000	34.00000	71.60000	1.5503	-0.48638	1.7812	-	-	-	*
		20.00000	34.00000	71.60000	2.6778	-1.0103	2.5239	-	-	-	*
		22.00000	34.00000	71.60000	4.0157	-1.8523	3.5266	-	-	-	*
		24.00000	34.00000	71.60000	4.9717	-3.1564	4.8297	-	-	-	*
		26.00000	34.00000	71.60000	4.9260	-5.2532	6.0762	-	-	-	*
		28.00000	34.00000	71.60000	2.7140	-7.5687	6.9421	-	-	-	*
		30.00000	34.00000	71.60000	3.0958	-9.3050	8.1516	-	-	-	*
		32.00000	34.00000	71.60000	3.2957	-9.4836	8.5138	-	-	-	*
		34.00000	34.00000	71.60000	3.2817	-9.6721	8.7795	-	-	-	*
		36.00000	34.00000	71.60000	3.2288	-9.9564	8.8272	-	-	-	*
		38.00000	34.00000	71.60000	3.0302	-10.381	8.6428	-	-	-	*
		40.00000	34.00000	71.60000	2.4583	-10.983	8.3071	-	-	-	*
		42.00000	34.00000	71.60000	1.3238	-12.141	8.2688	-	-	-	*
		44.00000	34.00000	71.60000	-0.14573	-13.878	8.9126	-	-	-	*
		46.00000	34.00000	71.60000	-0.14560	-13.861	8.9174	-	-	-	*
		48.00000	34.00000	71.60000	-0.14546	-13.844	8.9222	-	-	-	*
		50.00000	34.00000	71.60000	-0.14533	-13.827	8.9270	-	-	-	*
		52.00000	34.00000	71.60000	-0.14519	-13.811	8.9318	-	-	-	*
		54.00000	34.00000	71.60000	-0.14506	-13.794	8.9365	-	-	-	*
		56.00000	34.00000	71.60000	-0.14492	-13.777	8.9412	-	-	-	*
		58.00000	34.00000	71.60000	-5.0032	-8.5054	6.9461	-	-	-	*
		60.00000	34.00000	71.60000	-6.4429	-5.4764	6.4227	-	-	-	*
		62.00000	34.00000	71.60000	-6.4868	-3.6758	5.9975	-	-	-	*
		64.00000	34.00000	71.60000	-5.8240	-2.4752	5.2909	-	-	-	*
		66.00000	34.00000	71.60000	-4.9128	-1.6704	4.4279	-	-	-	*
		68.00000	34.00000	71.60000	-3.9147	-1.1092	3.5156	-	-	-	*
		70.00000	34.00000	71.60000	-2.8777	-0.69886	2.6349	-	-	-	*
		0.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	36.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	36.00000	71.60000	0.0	0.0	0.046472	-	-	-	*
		14.00000	36.00000	71.60000	0.0	0.0	0.51946	-	-	-	*
		16.00000	36.00000	71.60000	0.23058	-0.098278	1.0210	-	-	-	*
		18.00000	36.00000	71.60000	1.0187	-0.51936	1.5309	-	-	-	*
		20.00000	36.00000	71.60000	1.8289	-1.1389	2.1247	-	-	-	*
		22.00000	36.00000	71.60000	2.7892	-2.0500	2.8580	-	-	-	*
		24.00000	36.00000	71.60000	3.3579	-3.2782	4.0294	-	-	-	*
		26.00000	36.00000	71.60000	3.1848	-4.8277	5.2183	-	-	-	*
		28.00000	36.00000	71.60000	2.0362	-6.0359	5.9855	-	-	-	*
		30.00000	36.00000	71.60000	2.6770	-7.6462	6.9482	-	-	-	*
		32.00000	36.00000	71.60000	2.9923	-7.9710	7.2476	-	-	-	*
		34.00000	36.00000	71.60000	2.8739	-8.1976	7.5087	-	-	-	*
		36.00000	36.00000	71.60000	2.6850	-8.5065	7.6083	-	-	-	*
		38.00000	36.00000	71.60000	2.3261	-8.8932	7.5216	-	-	-	*
		40.00000	36.00000	71.60000	1.8463	-9.5834	7.5434	-	-	-	*
		42.00000	36.00000	71.60000	0.83452	-10.313	7.6012	-	-	-	*
		44.00000	36.00000	71.60000	-0.12968	-11.796	8.4604	-	-	-	*
		46.00000	36.00000	71.60000	-0.12955	-11.781	8.4596	-	-	-	*
		48.00000	36.00000	71.60000	-0.12942	-11.765	8.4587	-	-	-	*
		50.00000	36.00000	71.60000	-0.12929	-11.750	8.4577	-	-	-	*
		52.00000	36.00000	71.60000	-0.12916	-11.735	8.4567	-	-	-	*
		54.00000	36.00000	71.60000	-0.12903	-11.719	8.4556	-	-	-	*
		56.00000	36.00000	71.60000	-0.12890	-11.704	8.4543	-	-	-	*
		58.00000	36.00000	71.60000	-2.9860	-8.0621	6.5958	-	-	-	*
		60.00000	36.00000	71.60000	-4.4303	-5.9809	5.9795	-	-	-	*
		62.00000	36.00000	71.60000	-4.7051	-4.2346	5.3220	-	-	-	*
		64.00000	36.00000	71.60000	-4.5302	-3.0579	4.7059	-	-	-	*
		66.00000	36.00000	71.60000	-3.9749	-2.1464	3.9486	-	-	-	*
		68.00000	36.00000	71.60000	-3.2207	-1.4493	3.1389	-	-	-	*
		70.00000	36.00000	71.60000	-2.3491	-0.90609	2.3484	-	-	-	*
		0.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis
		2.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	38.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	38.00000	71.60000	0.0	0.0	0.31974	-	-	- *
		16.00000	38.00000	71.60000	0.042226	-0.024920	0.76946	-	-	- *
		18.00000	38.00000	71.60000	0.43790	-0.30911	1.2291	-	-	- *
		20.00000	38.00000	71.60000	1.0349	-0.90871	1.6871	-	-	- *
		22.00000	38.00000	71.60000	1.7511	-1.7526	2.2277	-	-	- *
		24.00000	38.00000	71.60000	2.2013	-2.8025	3.1415	-	-	- *
		26.00000	38.00000	71.60000	2.1215	-3.8614	4.1049	-	-	- *
		28.00000	38.00000	71.60000	1.5043	-4.5986	4.8481	-	-	- *
		30.00000	38.00000	71.60000	2.0728	-5.9878	5.4800	-	-	- *
		32.00000	38.00000	71.60000	2.5625	-6.4960	5.7186	-	-	- *
		34.00000	38.00000	71.60000	2.4797	-6.7824	5.9594	-	-	- *
		36.00000	38.00000	71.60000	2.2046	-7.0420	6.1055	-	-	- *
		38.00000	38.00000	71.60000	1.9284	-7.5088	6.2818	-	-	- *
		40.00000	38.00000	71.60000	1.4207	-8.0532	6.4169	-	-	- *
		42.00000	38.00000	71.60000	0.59380	-8.5361	6.5391	-	-	- *
		44.00000	38.00000	71.60000	-0.11495	-9.9227	7.5193	-	-	- *
		46.00000	38.00000	71.60000	-0.11483	-9.9086	7.5126	-	-	- *
		48.00000	38.00000	71.60000	-0.11471	-9.8945	7.5059	-	-	- *
		50.00000	38.00000	71.60000	-0.11458	-9.8804	7.4991	-	-	- *
		52.00000	38.00000	71.60000	-0.11446	-9.8664	7.4921	-	-	- *
		54.00000	38.00000	71.60000	-0.11434	-9.8523	7.4851	-	-	- *
		56.00000	38.00000	71.60000	-0.11422	-9.8383	7.4780	-	-	- *
		58.00000	38.00000	71.60000	-1.8931	-7.0045	5.8918	-	-	- *
		60.00000	38.00000	71.60000	-3.0561	-5.6538	5.3678	-	-	- *
		62.00000	38.00000	71.60000	-3.4424	-4.2457	4.7210	-	-	- *
		64.00000	38.00000	71.60000	-3.3276	-3.0781	4.0370	-	-	- *
		66.00000	38.00000	71.60000	-3.0138	-2.2302	3.3850	-	-	- *
		68.00000	38.00000	71.60000	-2.4590	-1.5164	2.6842	-	-	- *
		70.00000	38.00000	71.60000	-1.7375	-0.91837	1.9934	-	-	- *
		0.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	40.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	40.00000	71.60000	0.0	0.0	0.070047	-	-	- *
		16.00000	40.00000	71.60000	0.0	0.0	0.47999	-	-	- *
		18.00000	40.00000	71.60000	0.095338	-0.085991	0.88808	-	-	- *
		20.00000	40.00000	71.60000	0.40094	-0.44984	1.2707	-	-	- *
		22.00000	40.00000	71.60000	0.90754	-1.1602	1.6702	-	-	- *
		24.00000	40.00000	71.60000	1.3190	-1.9920	2.2274	-	-	- *
		26.00000	40.00000	71.60000	1.3885	-2.7568	2.9944	-	-	- *
		28.00000	40.00000	71.60000	1.1594	-3.2883	3.6632	-	-	- *
		30.00000	40.00000	71.60000	1.4045	-4.2615	4.1478	-	-	- *
		32.00000	40.00000	71.60000	1.9554	-4.8808	4.3481	-	-	- *
		34.00000	40.00000	71.60000	2.1209	-5.3887	4.5275	-	-	- *
		36.00000	40.00000	71.60000	1.9337	-5.7342	4.7802	-	-	- *
		38.00000	40.00000	71.60000	1.6192	-6.1284	5.0163	-	-	- *
		40.00000	40.00000	71.60000	1.1339	-6.5382	5.2080	-	-	- *
		42.00000	40.00000	71.60000	0.45664	-6.8784	5.3600	-	-	- *
		44.00000	40.00000	71.60000	-0.10147	-8.2155	6.3119	-	-	- *
		46.00000	40.00000	71.60000	-0.10136	-8.2026	6.3004	-	-	- *
		48.00000	40.00000	71.60000	-0.10125	-8.1898	6.2888	-	-	- *
		50.00000	40.00000	71.60000	-0.10114	-8.1769	6.2771	-	-	- *
		52.00000	40.00000	71.60000	-0.10103	-8.1641	6.2653	-	-	- *
		54.00000	40.00000	71.60000	-0.10093	-8.1513	6.2535	-	-	- *
		56.00000	40.00000	71.60000	-0.10082	-8.1385	6.2416	-	-	- *
		58.00000	40.00000	71.60000	-1.2411	-5.8334	4.9893	-	-	- *
		60.00000	40.00000	71.60000	-2.0943	-4.9216	4.5679	-	-	- *
		62.00000	40.00000	71.60000	-2.4702	-3.8700	4.0241	-	-	- *
		64.00000	40.00000	71.60000	-2.4371	-2.8636	3.4099	-	-	- *
		66.00000	40.00000	71.60000	-2.1349	-2.0068	2.7833	-	-	- *
		68.00000	40.00000	71.60000	-1.7092	-1.3389	2.1895	-	-	- *
		70.00000	40.00000	71.60000	-1.2050	-0.80905	1.5990	-	-	- *
		0.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	42.00000	71.60000	0.0	0.0	0.0	-	-	- *
		16.00000	42.00000	71.60000	0.0	0.0	0.15965	-	-	- *
		18.00000	42.00000	71.60000	0.0	0.0	0.51285	-	-	- *
		20.00000	42.00000	71.60000	0.061303	-0.083731	0.84891	-	-	- *
		22.00000	42.00000	71.60000	0.18444	-0.32761	1.1481	-	-	- *
		24.00000	42.00000	71.60000	0.62468	-1.0023	1.4368	-	-	- *
		26.00000	42.00000	71.60000	0.83054	-1.5894	2.0115	-	-	- *
		28.00000	42.00000	71.60000	0.84699	-2.0012	2.5592	-	-	- *
		30.00000	42.00000	71.60000	0.97637	-2.6276	3.1144	-	-	- *
		32.00000	42.00000	71.60000	1.2340	-3.0245	3.2778	-	-	- *
		34.00000	42.00000	71.60000	1.6017	-3.7327	3.4736	-	-	- *
		36.00000	42.00000	71.60000	1.6475	-4.3393	3.6735	-	-	- *
		38.00000	42.00000	71.60000	1.3912	-4.7699	3.8915	-	-	- *
		40.00000	42.00000	71.60000	0.94184	-5.0761	4.0842	-	-	- *
		42.00000	42.00000	71.60000	0.37328	-5.3253	4.2294	-	-	- *
		44.00000	42.00000	71.60000	-0.089172	-6.6324	5.0140	-	-	- *
		46.00000	42.00000	71.60000	-0.089077	-6.6207	4.9996	-	-	- *
		48.00000	42.00000	71.60000	-0.088982	-6.6090	4.9853	-	-	- *
		50.00000	42.00000	71.60000	-0.088888	-6.5973	4.9709	-	-	- *
		52.00000	42.00000	71.60000	-0.088793	-6.5856	4.9564	-	-	- *
		54.00000	42.00000	71.60000	-0.088699	-6.5739	4.9419	-	-	- *
		56.00000	42.00000	71.60000	-0.088605	-6.5623	4.9274	-	-	- *
		58.00000	42.00000	71.60000	-0.81861	-4.6661	4.0132	-	-	- *
		60.00000	42.00000	71.60000	-1.4121	-4.0245	3.6878	-	-	- *
		62.00000	42.00000	71.60000	-1.7027	-3.2351	3.2512	-	-	- *
		64.00000	42.00000	71.60000	-1.6971	-2.4184	2.7467	-	-	- *
		66.00000	42.00000	71.60000	-1.4447	-1.6469	2.2135	-	-	- *
		68.00000	42.00000	71.60000	-1.0243	-0.97308	1.6866	-	-	- *
		70.00000	42.00000	71.60000	-0.90312	-0.73540	1.1890	-	-	- *
		0.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		2.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		4.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		6.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		8.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		10.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		12.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		14.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		16.00000	44.00000	71.60000	0.0	0.0	0.0	-	-	- *
		18.00000	44.00000	71.60000	0.0	0.0	0.12957	-	-	- *
		20.00000	44.00000	71.60000	0.0	0.0	0.41509	-	-	- *
		22.00000	44.00000	71.60000	0.0	0.0	0.65411	-	-	- *
		24.00000	44.00000	71.60000	0.15419	-0.19828	0.88708	-	-	- *
		26.00000	44.00000	71.60000	0.40381	-0.51814	1.1335	-	-	- *
		28.00000	44.00000	71.60000	0.56837	-0.78921	1.6080	-	-	- *
		30.00000	44.00000	71.60000	0.70338	-1.1518	2.0504	-	-	- *
		32.00000	44.00000	71.60000	0.82830	-1.4198	2.4851	-	-	- *
		34.00000	44.00000	71.60000	0.98387	-1.8506	2.6473	-	-	- *
		36.00000	44.00000	71.60000	1.1387	-2.5223	2.8084	-	-	- *
		38.00000	44.00000	71.60000	1.0637	-3.1317	2.9670	-	-	- *
		40.00000	44.00000	71.60000	0.75825	-3.5585	3.1018	-	-	- *
		42.00000	44.00000	71.60000	0.31049	-3.8609	3.2069	-	-	- *
		44.00000	44.00000	71.60000	-0.077313	-5.1679	3.7542	-	-	- *
		46.00000	44.00000	71.60000	-0.077098	-5.1512	3.7402	-	-	- *
		48.00000	44.00000	71.60000	-0.076883	-5.1346	3.7262	-	-	- *
		50.00000	44.00000	71.60000	-0.076669	-5.1179	3.7122	-	-	- *
		52.00000	44.00000	71.60000	-0.076454	-5.1013	3.6983	-	-	- *
		54.00000	44.00000	71.60000	-0.076240	-5.0847	3.6845	-	-	- *
		56.00000	44.00000	71.60000	-0.076026	-5.0681	3.6706	-	-	- *
		58.00000	44.00000	71.60000	-0.52540	-3.5202	3.0574	-	-	- *
		60.00000	44.00000	71.60000	-0.91080	-3.0512	2.8145	-	-	- *
		62.00000	44.00000	71.60000	-1.0952	-2.4459	2.4767	-	-	- *
		64.00000	44.00000	71.60000	-1.0632	-1.7808	2.0769	-	-	- *
		66.00000	44.00000	71.60000	-0.87584	-1.1736	1.6461	-	-	- *

Type/No.		Coordinates			Displacements				Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		68.00000	44.00000	71.60000	-0.77776	-0.86850	1.2083	-	-	-	*
		70.00000	44.00000	71.60000	-0.63216	-0.60507	0.77890	-	-	-	*
		0.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	46.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	46.00000	71.60000	0.0	0.0	0.19604	-	-	-	*
		24.00000	46.00000	71.60000	0.0	0.0	0.35760	-	-	-	*
		26.00000	46.00000	71.60000	0.15078	-0.13325	0.49561	-	-	-	*
		28.00000	46.00000	71.60000	0.33179	-0.33179	0.68873	-	-	-	*
		30.00000	46.00000	71.60000	0.48501	-0.55850	1.0614	-	-	-	*
		32.00000	46.00000	71.60000	0.60020	-0.81456	1.4264	-	-	-	*
		34.00000	46.00000	71.60000	0.66136	-1.0927	1.7819	-	-	-	*
		36.00000	46.00000	71.60000	0.65512	-1.3830	2.0206	-	-	-	*
		38.00000	46.00000	71.60000	0.62072	-1.8144	2.1249	-	-	-	*
		40.00000	46.00000	71.60000	0.47489	-2.2557	2.2201	-	-	-	*
		42.00000	46.00000	71.60000	0.20163	-2.5540	2.2887	-	-	-	*
		44.00000	46.00000	71.60000	-0.058585	-3.7495	2.6309	-	-	-	*
		46.00000	46.00000	71.60000	-0.058232	-3.7268	2.6189	-	-	-	*
		48.00000	46.00000	71.60000	-0.057878	-3.7042	2.6070	-	-	-	*
		50.00000	46.00000	71.60000	-0.057524	-3.6815	2.5951	-	-	-	*
		52.00000	46.00000	71.60000	-0.057170	-3.6589	2.5833	-	-	-	*
		54.00000	46.00000	71.60000	-0.056817	-3.6363	2.5715	-	-	-	*
		56.00000	46.00000	71.60000	-0.056463	-3.6136	2.5597	-	-	-	*
		58.00000	46.00000	71.60000	-0.30888	-2.3784	2.1846	-	-	-	*
		60.00000	46.00000	71.60000	-0.52542	-2.0229	2.0075	-	-	-	*
		62.00000	46.00000	71.60000	-0.60504	-1.5529	1.7527	-	-	-	*
		64.00000	46.00000	71.60000	-0.65658	-1.2639	1.4433	-	-	-	*
		66.00000	46.00000	71.60000	-0.63390	-0.97621	1.1014	-	-	-	*
		68.00000	46.00000	71.60000	-0.54885	-0.70435	0.74331	-	-	-	*
		70.00000	46.00000	71.60000	-0.41448	-0.45593	0.37671	-	-	-	*
		0.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	48.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	48.00000	71.60000	0.13198	-0.14935	0.034876	-	-	-	*
		30.00000	48.00000	71.60000	0.27679	-0.36066	0.14198	-	-	-	*
		32.00000	48.00000	71.60000	0.38357	-0.58905	0.45989	-	-	-	*
		34.00000	48.00000	71.60000	0.44342	-0.82900	0.75449	-	-	-	*
		36.00000	48.00000	71.60000	0.44819	-1.0707	1.0209	-	-	-	*
		38.00000	48.00000	71.60000	0.39280	-1.2993	1.2476	-	-	-	*
		40.00000	48.00000	71.60000	0.27825	-1.4956	1.4194	-	-	-	*
		42.00000	48.00000	71.60000	0.11432	-1.6385	1.5214	-	-	-	*
		44.00000	48.00000	71.60000	-0.039778	-2.5458	1.7148	-	-	-	*
		46.00000	48.00000	71.60000	-0.039595	-2.5341	1.7016	-	-	-	*
		48.00000	48.00000	71.60000	-0.039412	-2.5224	1.6885	-	-	-	*
		50.00000	48.00000	71.60000	-0.039229	-2.5106	1.6754	-	-	-	*
		52.00000	48.00000	71.60000	-0.039046	-2.4989	1.6623	-	-	-	*
		54.00000	48.00000	71.60000	-0.038863	-2.4872	1.6493	-	-	-	*
		56.00000	48.00000	71.60000	-0.038680	-2.4755	1.6363	-	-	-	*
		58.00000	48.00000	71.60000	-0.18063	-1.5715	1.4251	-	-	-	*
		60.00000	48.00000	71.60000	-0.32339	-1.4068	1.2969	-	-	-	*
		62.00000	48.00000	71.60000	-0.41261	-1.1966	1.1057	-	-	-	*
		64.00000	48.00000	71.60000	-0.44201	-0.96138	0.86641	-	-	-	*
		66.00000	48.00000	71.60000	-0.41303	-0.71866	0.59244	-	-	-	*
		68.00000	48.00000	71.60000	-0.33193	-0.48129	0.29237	-	-	-	*
		70.00000	48.00000	71.60000	-0.20713	-0.25743	0.050100	-	-	-	*
		0.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	50.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	50.00000	71.60000	0.079446	-0.11556	0.027320	-	-	-	*
		32.00000	50.00000	71.60000	0.18414	-0.31568	0.054339	-	-	-	*
		34.00000	50.00000	71.60000	0.24911	-0.51988	0.25359	-	-	-	*
		36.00000	50.00000	71.60000	0.26972	-0.71924	0.47326	-	-	-	*
		38.00000	50.00000	71.60000	0.24422	-0.90172	0.65232	-	-	-	*
		40.00000	50.00000	71.60000	0.17549	-1.0529	0.78319	-	-	-	*
		42.00000	50.00000	71.60000	0.072374	-1.1580	0.85771	-	-	-	*
		44.00000	50.00000	71.60000	-0.028062	-1.7960	0.95705	-	-	-	*
		46.00000	50.00000	71.60000	-0.027879	-1.7843	0.94647	-	-	-	*
		48.00000	50.00000	71.60000	-0.027696	-1.7725	0.93593	-	-	-	*
		50.00000	50.00000	71.60000	-0.027513	-1.7608	0.92542	-	-	-	*
		52.00000	50.00000	71.60000	-0.027330	-1.7491	0.91495	-	-	-	*
		54.00000	50.00000	71.60000	-0.027147	-1.7374	0.90451	-	-	-	*
		56.00000	50.00000	71.60000	-0.026964	-1.7257	0.89410	-	-	-	*
		58.00000	50.00000	71.60000	-0.11292	-1.0954	0.77774	-	-	-	*
		60.00000	50.00000	71.60000	-0.20036	-0.97174	0.68197	-	-	-	*
		62.00000	50.00000	71.60000	-0.24974	-0.80748	0.53371	-	-	-	*
		64.00000	50.00000	71.60000	-0.25455	-0.61729	0.34067	-	-	-	*
		66.00000	50.00000	71.60000	-0.21375	-0.41468	0.10869	-	-	-	*
		68.00000	50.00000	71.60000	-0.13020	-0.21049	0.041720	-	-	-	*
		70.00000	50.00000	71.60000	-0.0089985	-0.012469	0.0059357	-	-	-	*
		0.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	52.00000	71.60000	0.0022857	-0.0043265	0.0038976	-	-	-	*
		34.00000	52.00000	71.60000	0.076428	-0.17612	0.035142	-	-	-	*
		36.00000	52.00000	71.60000	0.11517	-0.33911	0.054906	-	-	-	*
		38.00000	52.00000	71.60000	0.11863	-0.48365	0.11242	-	-	-	*
		40.00000	52.00000	71.60000	0.090397	-0.59888	0.22095	-	-	-	*
		42.00000	52.00000	71.60000	0.038156	-0.67409	0.28040	-	-	-	*
		44.00000	52.00000	71.60000	-0.016346	-1.0462	0.33507	-	-	-	*
		46.00000	52.00000	71.60000	-0.016163	-1.0344	0.32598	-	-	-	*
		48.00000	52.00000	71.60000	-0.015980	-1.0227	0.31690	-	-	-	*
		50.00000	52.00000	71.60000	-0.015797	-1.0110	0.30783	-	-	-	*
		52.00000	52.00000	71.60000	-0.015614	-0.99929	0.29878	-	-	-	*
		54.00000	52.00000	71.60000	-0.015431	-0.98758	0.28973	-	-	-	*
		56.00000	52.00000	71.60000	-0.015248	-0.97586	0.28069	-	-	-	*
		58.00000	52.00000	71.60000	-0.057295	-0.61306	0.20942	-	-	-	*
		60.00000	52.00000	71.60000	-0.097568	-0.52199	0.13093	-	-	-	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis	
		62.00000	52.00000	71.60000	-0.11068	-0.39476	0.060930	-	-	-	*
		64.00000	52.00000	71.60000	-0.090544	-0.24221	0.043977	-	-	-	*
		66.00000	52.00000	71.60000	-0.034915	-0.074719	0.018632	-	-	-	*
		68.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	52.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	54.00000	71.60000	0.011333	-0.050561	0.013396	-	-	-	*
		40.00000	54.00000	71.60000	0.018843	-0.13661	0.028136	-	-	-	*
		42.00000	54.00000	71.60000	0.0097113	-0.18775	0.035764	-	-	-	*
		44.00000	54.00000	71.60000	-0.0046303	-0.29634	0.055981	-	-	-	*
		46.00000	54.00000	71.60000	-0.0044472	-0.28462	0.054331	-	-	-	*
		48.00000	54.00000	71.60000	-0.0042642	-0.27291	0.052657	-	-	-	*
		50.00000	54.00000	71.60000	-0.0040811	-0.26119	0.050957	-	-	-	*
		52.00000	54.00000	71.60000	-0.0038980	-0.24948	0.049231	-	-	-	*
		54.00000	54.00000	71.60000	-0.0037150	-0.23776	0.047479	-	-	-	*
		56.00000	54.00000	71.60000	-0.0035319	-0.22604	0.045700	-	-	-	*
		58.00000	54.00000	71.60000	-0.010794	-0.12629	0.026616	-	-	-	*
		60.00000	54.00000	71.60000	-0.010514	-0.061505	0.015486	-	-	-	*
		62.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	54.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		40.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		42.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		44.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		46.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		48.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		50.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		56.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	56.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		40.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		42.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		44.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		46.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		48.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		50.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		56.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	58.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		0.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		2.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		4.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		6.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		8.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		10.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		12.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		14.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		16.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		18.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		20.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		22.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		24.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		26.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		28.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		30.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		32.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		34.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		36.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		38.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		40.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		42.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		44.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		46.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		48.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		50.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		52.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		54.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		56.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		58.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		60.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		62.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		64.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		66.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		68.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
		70.00000	60.00000	71.60000	0.0	0.0	0.0	-	-	-	*
Line 1	Line 1	30.00000	4.70000	71.00000	0.89487	2.0407	2.7045	2.0407	-0.89487	90.000	*
	0.94000	30.00000	5.64000	71.00000	1.0423	2.7779	3.2222	2.7779	-1.0423	90.000	*
	1.8800	30.00000	6.58000	71.00000	1.1981	3.5084	3.6670	3.5084	-1.1981	90.000	*
	2.8200	30.00000	7.52000	71.00000	1.5083	4.3396	4.1891	4.3396	-1.5083	90.000	*
	3.7600	30.00000	8.46000	71.00000	1.8382	5.1608	4.7862	5.1608	-1.8382	90.000	*
	4.7000	30.00000	9.40000	71.00000	2.1704	5.9653	5.4453	5.9653	-2.1704	90.000	*
	5.6400	30.00000	10.34000	71.00000	2.5002	6.7574	6.1423	6.7574	-2.5002	90.000	*
	6.5800	30.00000	11.28000	71.00000	2.7760	7.5234	6.8308	7.5234	-2.7760	90.000	*
	7.5200	30.00000	12.22000	71.00000	3.0079	8.2857	7.4761	8.2857	-3.0079	90.000	*
	8.4600	30.00000	13.16000	71.00000	3.2213	9.0679	8.0252	9.0679	-3.2213	90.000	*
	9.4000	30.00000	14.10000	71.00000	3.4097	9.8798	8.4097	9.8798	-3.4097	90.000	*
Line 2	Line 2	32.00000	15.10000	71.00000	3.6998	10.909	8.9506	3.6998	10.909	0.0	*
	1.0286	33.02857	15.10000	71.00000	3.7294	10.980	9.1142	3.7294	10.980	0.0	*
	2.0571	34.05714	15.10000	71.00000	3.7655	11.065	9.2202	3.7655	11.065	0.0	*
	3.0857	35.08571	15.10000	71.00000	3.8017	11.168	9.2566	3.8017	11.168	0.0	*
	4.1143	36.11429	15.10000	71.00000	3.8304	11.296	9.2190	3.8304	11.296	0.0	*
	5.1429	37.14286	15.10000	71.00000	3.8405	11.459	9.1110	3.8405	11.459	0.0	*
	6.1714	38.17143	15.10000	71.00000	3.8147	11.673	8.9434	3.8147	11.673	0.0	*
	7.2000	39.20000	15.10000	71.00000	3.7205	11.964	8.7339	3.7205	11.964	0.0	*
Line 3	Line 3	39.40000	14.20000	71.00000	3.1868	11.531	8.6549	3.1868	11.531	0.0	*
	0.85000	40.25000	14.20000	71.00000	2.8596	11.875	8.4859	2.8596	11.875	0.0	*
	1.7000	41.10000	14.20000	71.00000	2.4518	12.404	8.4113	2.4518	12.404	0.0	*
	2.5500	41.95000	14.20000	71.00000	1.7631	13.088	8.4120	1.7631	13.088	0.0	*
	3.4000	42.80000	14.20000	71.00000	0.60587	13.686	8.4656	0.60587	13.686	0.0	*
	4.2500	43.65000	14.20000	71.00000	0.23054	14.977	8.9561	0.23054	14.977	0.0	*
	5.1000	44.50000	14.20000	71.00000	0.23067	14.988	8.9512	0.23067	14.988	0.0	*
Line 4	Line 4	44.60000	14.20000	71.00000	0.23069	14.989	8.9506	-14.989	0.23069	270.00	*
	0.9900	44.60000	13.21000	71.00000	0.21796	13.865	8.9960	-13.865	0.21796	270.00	*
	1.9800	44.60000	12.22000	71.00000	0.20576	12.804	8.8443	-12.804	0.20576	270.00	*
	2.9700	44.60000	11.23000	71.00000	0.19409	11.800	8.5324	-11.800	0.19409	270.00	*
	3.9600	44.60000	10.24000	71.00000	0.18292	10.847	8.0942	-10.847	0.18292	270.00	*
	4.9500	44.60000	9.25000	71.00000	0.17224	9.9414	7.5606	-9.9414	0.17224	270.00	*
	5.9400	44.60000	8.26000	71.00000	0.16204	9.0775	6.9599	-9.0775	0.16204	270.00	*
	6.9300	44.60000	7.27000	71.00000	0.15230	8.2502	6.3175	-8.2502	0.15230	270.00	*
	7.9200	44.60000	6.28000	71.00000	0.14302	7.4545	5.6560	-7.4545	0.14302	270.00	*
	8.9100	44.60000	5.29000	71.00000	0.13417	6.6851	4.9950	-6.6851	0.13417	270.00	*
	9.9000	44.60000	4.30000	71.00000	0.12574	5.9371	4.3515	-5.9371	0.12574	270.00	*
Line 5	Line 5	29.00000	57.20000	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	1.0167	29.00000	56.18333	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	2.0333	29.00000	55.16667	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	3.0500	29.00000	54.15000	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	4.0667	29.00000	53.13333	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	5.0833	29.00000	52.11667	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
	6.1000	29.00000	51.10000	71.60000	0.0	0.0	0.0	0.0	0.0	270.00	*
Line 6	Line 6	30.70000	51.10000	71.60000	0.017153	-0.027857	0.0093707	0.027669	0.017455	269.38	*
	1.0223	30.68889	50.07778	71.60000	0.11220	-0.17289	0.036344	0.17166	0.11407	269.38	*
	2.0446	30.67778	49.05556	71.60000	0.21108	-0.30772	0.054611	0.30541	0.21441	269.38	*
	3.0668	30.66667	48.03333	71.60000	0.31362	-0.43123	0.24331	0.42779	0.31829	269.38	*
	4.0891	30.65556	47.01111	71.60000	0.41955	-0.54218	0.70740	0.53759	0.42542	269.38	*
	5.1114	30.64444	45.98889	71.60000	0.52842	-0.63925	1.1850	0.63347	0.53534	269.38	*
	6.1337	30.63333	44.96667	71.60000	0.63900	-0.80209	1.6831	0.79510	0.64768	269.38	*
	7.1560	30.62222	43.94444	71.60000	0.74880	-1.2504	2.2119	1.2422	0.76235	269.38	*
	8.1783	30.61111	42.92222	71.60000	0.87967	-1.9709	2.7455	1.9613	0.90104	269.38	*
	9.2005	30.60000	41.90000	71.60000	1.0276	-2.7749	3.2229	2.7635	1.0577	269.38	*
Line 7	Line 7	30.65000	41.90000	71.60000	1.0304	-2.7807	3.2262	1.0574	-2.7705	359.44	*
	1.0250	31.67500	41.89000	71.60000	1.2060	-3.0328	3.3033	1.2355	-3.0209	359.44	*
	2.0501	32.70000	41.88000	71.60000	1.4137	-3.3673	3.3928	1.4465	-3.3534	359.44	*
	3.0751	33.72500	41.87000	71.60000	1.6033	-3.7521	3.5043	1.6398	-3.7363	359.44	*
	4.1002	34.75000	41.86000	71.60000	1.6816	-4.0837	3.6079	1.7213	-4.0671	359.44	*
	5.1252	35.77500	41.85000	71.60000	1.6905	-4.4028	3.7220	1.7333	-4.3861	359.44	*
	6.1503	36.80000	41.84000	71.60000	1.6197	-4.6861	3.8421	1.6653	-4.6701	359.44	*
	7.1753	37.82500	41.83000	71.60000	1.4413	-4.8562	3.9606	1.4886	-4.8419	359.44	*
	8.2004	38.85000	41.82000	71.60000	1.2320	-5.0280	4.0724	1.2810	-5.0157	359.44	*
	9.2254	39.87500	41.81000	71.60000	0.98897	-5.1941	4.1740	1.0396	-5.1843	359.44	*
	10.250	40.90000	41.80000	71.60000	0.71201	-5.3465	4.2633	0.76413	-5.3393	359.44	*
Line 8	Line 8	41.00000	41.80000	71.60000	0.68319	-5.3595	4.2708	-5.3502	-0.75273	89.256	*
	0.96258	41.01250	42.76250	71.60000	0.62716	-4.6536	3.7679	-4.6451	-0.68753	89.256	*
	1.9252	41.02500	43.72500	71.60000	0.56994	-3.9277	3.2928	-3.9200	-0.62090	89.256	*
	2.8877	41.03750	44.68750	71.60000	0.48007	-3.2479	2.8387	-3.2414	-0.52220	89.256	*
	3.8503	41.05000	45.65000	71.60000	0.38093	-2.6311	2.4066	-2.6259	-0.41507	89.256	*
	4.8129	41.06250	46.61250	71.60000	0.28212	-2.0870	2.0134	-2.0832	-0.30920	89.256	*
	5.7755	41.07500	47.57500	71.60000	0.21255	-1.6779	1.6468	-1.6750	-0.23432	89.256	*
	6.7381	41.08750	48.53750	71.60000	0.17355	-1.4572	1.2986	-1.4548	-0.19245	89.256	*
	7.7006	41.10000	49.50000	71.60000	0.13860	-1.2342	0.98561	-1.2323	-0.15462	89.256	*
	8.6632	41.11250	50.46250	71.60000	0.10716	-1.0094	0.69427	-1.0079	-0.12026	89.256	*
	9.6258	41.12500	51.42500	71.60000	0.078770	-0.78296	0.41961	-0.78187	-0.088931	89.256	*
	10.588	41.13750	52.38750	71.60000	0.053040	-0.55515	0.15503	-0.55442	-0.060245	89.256	*
	11.551	41.15000	53.35000	71.60000	0.029652	-0.32617	0.053016	-0.32576	-0.033885	89.256	*
	12.514	41.16250	54.31250	71.60000	0.0083334	-0.096167	0.021531	-0.096051	-0.0095816	89.256	*
	13.476	41.17500	55.27500	71.60000	0.0	0.0	0.0	0.0	0.0	89.256	*
	14.439	41.18750	56.23750	71.60000	0.0	0.0	0.0	0.0	0.0	89.256	*
	15.401	41.20000	57.20000	71.60000	0.0	0.0	0.0	0.0	0.0	89.256	*
Line 9	Line 9	58.70000	19.40000	77.00000	-14.471	0.10191	8.9507	-0.26905	14.468	88.531	*
	0.97532	58.72500	20.37500	77.00000	-14.450	0.10176	8.9516	-0.26866	14.448	88.531	*
	1.9506	58.75000	21.35000	77.00000	-14.429	0.10162	8.9524	-0.26828	14.427	88.531	*
	2.9260	58.77500	22.32500	77.00000	-14.409	0.10147	8.9531	-0.26790	14.407	88.531	*
	3.9013	58.80000	23.30000	77.00000	-14.388	0.10133	8.9537	-0.26752	14.386	88.531	*
	4.8766	58.82500	24.27500	77.00000	-14.368	0.10118	8.9543	-0.26714	14.366	88.531	*
	5.8519	58.85000	25.25000	77.00000	-14.347	0.10104	8.9548	-0.26676	14.345	88.531	*
	6.8272	58.87500	26.22500	77.00000	-14.327	0.10089	8.9552	-0.26638	14.325	88.531	*
	7.8026	58.90000	27.20000	77.00000	-14.307	0.10075	8.9556	-0.26600	14.304	88.531	*
	8.7779	58.92500	28.17500	77.00000	-14.286	0.10061	8.9559	-0.26562	14.284	88.531	*
	9.7532	58.95000	29.15000	77.00000	-14.266	0.10046	8.9561	-0.26524	14.264	88.531	*
	10.729	58.97500	30.12500	77.00000	-14.245	0.10032	8.9563	-0.26486	14.243	88.531	*
	11.704	59.00000	31.10000	77.00000	-11.149	-1.8581	7.4152	-2.1433	11.098	88.531	*
	12.679	59.02500	32.07500	77.00000	-9.4420	-4.6040	7.1101	-4.8445	9.3209	88.531	*
	13.654	59.05000	33.05000	77.00000	-7.5138	-6.0356	6.8035	-6.2263	7.3566	88.531	*
	14.630	59.07500	34.02500	77.00000	-6.0053	-6.6889	6.6090	-6.8406	5.8319	88.531	*
	15.605	59.10000	35.00000	77.00000	-4.9109	-6.9703	6.4901	-7.0939	4.7306	88.531	*
Line 10	Line 10	59.15000	35.00000	77.00000	-4.9431	-6.9047	6.4737	-4.9431	-6.9047	0.0	*
	0.96667	60.11667	35.00000	77.00000	-5.3385	-5.7059	6.1437	-5.3385	-5.7059	0.0	*
	1.9333	61.08333	35.00000	77.00000	-5.5292	-4.7860	5.8975	-5.5292	-4.7860	0.0	*
	2.9000	62.05000	35.00000	77.00000	-5.5654	-4.0476	5.6606	-5.5654	-4.0476	0.0	*
	3.8667	63.01667	35.00000	77.00000	-5.4332	-3.4071	5.3639	-5.4332	-3.4071	0.0	*
	4.8333	63.98333	35.00000	77.00000	-5.1875	-2.8591	5.0196	-5.1875	-2.8591	0.0	*
	5.8000	64.95000	35.00000	77.00000	-4.8656	-2.3921	4.6403	-4.8656	-2.3921	0.0	*
Line 11	Line 11	65.00000	35.00000	77.00000	-4.8474	-2.3699	4.6200	2.4177	-4.8237	269.43	*
	1.0100	64.99000	33.99000	77.00000	-5.3982	-2.0356	4.8792	2.0889	-5.3778	269.43	*
	2.0201	64.98000	32.98000	77.00000	-5.8970	-1.5629	5.1032	1.6212	-5.8813	269.43	*
	3.0301	64.97000	31.97000	77.00000	-6.3042	-0.96285	5.2848	1.0252	-6.2943	269.43	*
	4.0402	64.96000	30.96000	77.00000	-6.5818	-0.26445	5.4168	0.32960	-6.5788	269.43	*
	5.0502	64.95000	29.95000	77.00000	-8.5053	0.059896	6.5293	0.024313	-8.5055	269.43	*
	6.0603	64.94000	28.94000	77.00000	-8.5077	0.059913	6.5311	0.024320	-8.5079	269.43	*
	7.0703	64.93000	27.93000	77.00000	-8.5101	0.059930	6.5330	0.024327	-8.5103	269.43	*
	8.0804	64.92000	26.92000	77.00000	-8.5125	0.059947	6.5348	0.024334	-8.5127	269.43	*
	9.0904	64.91000	25.91000	77.00000	-8.5149	0.059964	6.5367	0.024341	-8.5151	269.43	*
	10.100	64.90000	24.90000	77.00000	-8.5173	0.059981	6.5385	0.024347	-8.5174	269.43	*
Line 12	Line 12	64.95000	24.90000	77.00000	-8.4758	0.059689	6.5065	-7.2986	-4.3096	329.04	*
	0.58310	65.45000	24.60000	77.00000	-8.0638	0.056787	6.1813	-6.9439	-4.1001	329.04	*
	1.1662	65.95000	24.30000	77.00000	-7.6595	0.053940	5.8519	-6.5957	-3.8945	329.04	*
Line 13	Line 13	66.00000	24.30000	77.00000	-7.6196	0.053659	5.8190	0.37704	-7.6104	266.76	*
	1.0617	65.94000	23.24000	77.00000	-7.6615	0.053954	5.8536	0.37911	-7.6523	266.76	*
	2.1234	65.88000	22.18000	77.00000	-7.7035	0.054250	5.8882	0.38118	-7.6942	266.76	*
	3.1851	65.82000	21.12000	77.00000	-7.7455	0.054546	5.9228	0.38327	-7.7362	266.76	*
	4.2468	65.76000	20.06000	77.00000	-7.7876	0.054842	5.9573	0.38535	-7.7783	266.76	*
	5.3085	65.70000	19.00000	77.00000	-7.8298	0.055140	5.9918	0.38744	-7.8204	266.76	*
Line 14	Line 14	58.75000	19.40000	77.00000	-14.414	0.10151	8.9529	-14.396	-0.73285	356.68	*
	0.98737	59.73571	19.34286	77.00000	-13.328	0.093862	8.8934	-13.311	-0.67766	356.68	*
	1.9747	60.72143	19.28571	77.00000	-12.302	0.086630	8.6632	-12.286	-0.62545	356.68	*
	2.9621	61.70714	19.22857	77.00000	-11.328	0.079776	8.2959	-11.314	-0.57597	356.68	*
	3.9495	62.69286	19.17143	77.00000	-10.403	0.073264	7.8219	-10.390	-0.52895	356.68	*
	4.9368	63.67857	19.11429	77.00000	-9.5222	0.067058	7.2691	-9.5102	-0.48414	356.68	*
	5.9242	64.66429	19.05714	77.00000	-8.6795	0.061123	6.6626	-8.6684	-0.44129	356.68	*

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal dispalcement	Horizontal displacement	Angle of Line to x Axis
	6.9116	65.65000	19.00000	77.00000	-7.8701	0.055423	6.0246	-7.8601	-0.40014	356.68 *

* Result includes imported displacement(s).

Specific Building Damage Results - Horizontal Displacements

Structure: 24 Netherhall Gardens | Sub-structure: Front

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.00000	4.70000	71.00000	0.89487	2.0407	2.0407	-0.89487 d
0.94000	30.00000	5.64000	71.00000	1.0423	2.7779	2.7779	-1.0423 d
1.8800	30.00000	6.58000	71.00000	1.1981	3.5084	3.5084	-1.1981 d
2.8200	30.00000	7.52000	71.00000	1.5083	4.3396	4.3396	-1.5083 d
3.7600	30.00000	8.46000	71.00000	1.8382	5.1608	5.1608	-1.8382 d
4.7000	30.00000	9.40000	71.00000	2.1704	5.9653	5.9653	-2.1704 d
5.6400	30.00000	10.34000	71.00000	2.5002	6.7574	6.7574	-2.5002 d
6.5800	30.00000	11.28000	71.00000	2.7760	7.5234	7.5234	-2.7760 d
7.5200	30.00000	12.22000	71.00000	3.0079	8.2857	8.2857	-3.0079 d
8.4600	30.00000	13.16000	71.00000	3.2213	9.0679	9.0679	-3.2213 d
9.4000	30.00000	14.10000	71.00000	3.4097	9.8798	9.8798	-3.4097 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	32.00000	15.10000	71.00000	3.6998	10.909	3.6998	10.909 d
1.0286	33.02857	15.10000	71.00000	3.7294	10.980	3.7294	10.980 d
2.0571	34.05714	15.10000	71.00000	3.7655	11.065	3.7655	11.065 d
3.0857	35.08571	15.10000	71.00000	3.8017	11.168	3.8017	11.168 d
4.1143	36.11429	15.10000	71.00000	3.8304	11.296	3.8304	11.296 d
5.1429	37.14286	15.10000	71.00000	3.8405	11.459	3.8405	11.459 d
6.1714	38.17143	15.10000	71.00000	3.8147	11.673	3.8147	11.673 d
7.2000	39.20000	15.10000	71.00000	3.7205	11.964	3.7205	11.964 d

d - Displacements include imported displacements.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.40000	14.20000	71.00000	3.1868	11.531	3.1868	11.531 d
0.85000	40.25000	14.20000	71.00000	2.8596	11.875	2.8596	11.875 d
1.7000	41.10000	14.20000	71.00000	2.4518	12.404	2.4518	12.404 d
2.5500	41.95000	14.20000	71.00000	1.7631	13.088	1.7631	13.088 d
3.4000	42.80000	14.20000	71.00000	0.60587	13.686	0.60587	13.686 d
4.2500	43.65000	14.20000	71.00000	0.23054	14.977	0.23054	14.977 d
5.1000	44.50000	14.20000	71.00000	0.23067	14.988	0.23067	14.988 d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	44.60000	14.20000	71.00000	0.23069	14.989	-14.989	0.23069 d
0.99000	44.60000	13.21000	71.00000	0.21796	13.865	-13.865	0.21796 d
1.9800	44.60000	12.22000	71.00000	0.20576	12.804	-12.804	0.20576 d
2.9700	44.60000	11.23000	71.00000	0.19409	11.800	-11.800	0.19409 d
3.9600	44.60000	10.24000	71.00000	0.18292	10.847	-10.847	0.18292 d
4.9500	44.60000	9.25000	71.00000	0.17224	9.9414	-9.9414	0.17224 d
5.9400	44.60000	8.26000	71.00000	0.16204	9.0775	-9.0775	0.16204 d
6.9300	44.60000	7.27000	71.00000	0.15230	8.2502	-8.2502	0.15230 d
7.9200	44.60000	6.28000	71.00000	0.14302	7.4545	-7.4545	0.14302 d
8.9100	44.60000	5.29000	71.00000	0.13417	6.6851	-6.6851	0.13417 d
9.9000	44.60000	4.30000	71.00000	0.12574	5.9371	-5.9371	0.12574 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	29.00000	57.20000	71.60000	0.0	0.0	0.0	0.0 d
1.0167	29.00000	56.18333	71.60000	0.0	0.0	0.0	0.0 d
2.0333	29.00000	55.16667	71.60000	0.0	0.0	0.0	0.0 d
3.0500	29.00000	54.15000	71.60000	0.0	0.0	0.0	0.0 d
4.0667	29.00000	53.13333	71.60000	0.0	0.0	0.0	0.0 d
5.0833	29.00000	52.11667	71.60000	0.0	0.0	0.0	0.0 d
6.1000	29.00000	51.10000	71.60000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.70000	51.10000	71.60000	0.017153	-0.027857	0.027669	0.017455 d
1.0223	30.68889	50.07778	71.60000	0.11220	-0.17289	0.17166	0.11407 d
2.0446	30.67778	49.05556	71.60000	0.21108	-0.30772	0.30541	0.21441 d
3.0668	30.66667	48.03333	71.60000	0.31362	-0.43123	0.42779	0.31829 d
4.0891	30.65556	47.01111	71.60000	0.41955	-0.54218	0.53759	0.42542 d
5.1114	30.64444	45.98889	71.60000	0.52842	-0.63925	0.63347	0.53534 d
6.1337	30.63333	44.96667	71.60000	0.63900	-0.80209	0.79510	0.64768 d
7.1560	30.62222	43.94444	71.60000	0.74880	-1.2504	1.2422	0.76235 d
8.1783	30.61111	42.92222	71.60000	0.87967	-1.9709	1.9613	0.90104 d
9.2005	30.60000	41.90000	71.60000	1.0276	-2.7749	2.7635	1.0577 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	30.65000	41.90000	71.60000	1.0304	-2.7807	1.0574	-2.7705 d
1.0250	31.67500	41.89000	71.60000	1.2060	-3.0328	1.2355	-3.0209 d
2.0501	32.70000	41.88000	71.60000	1.4137	-3.3673	1.4465	-3.3534 d

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
3.0751	33.72500	41.87000	71.60000	1.6033	-3.7521	1.6398	-3.7363 d
4.1002	34.75000	41.86000	71.60000	1.6816	-4.0837	1.7213	-4.0671 d
5.1252	35.77500	41.85000	71.60000	1.6905	-4.4028	1.7333	-4.3861 d
6.1503	36.80000	41.84000	71.60000	1.6197	-4.6861	1.6653	-4.6701 d
7.1753	37.82500	41.83000	71.60000	1.4413	-4.8562	1.4886	-4.8419 d
8.2004	38.85000	41.82000	71.60000	1.2320	-5.0280	1.2810	-5.0157 d
9.2254	39.87500	41.81000	71.60000	0.98897	-5.1941	1.0396	-5.1843 d
10.250	40.90000	41.80000	71.60000	0.71201	-5.3465	0.76413	-5.3393 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	41.00000	41.80000	71.60000	0.68319	-5.3595	-5.3502	-0.75273 d
0.96258	41.01250	42.76250	71.60000	0.62716	-4.6536	-4.6451	-0.68753 d
1.9252	41.02500	43.72500	71.60000	0.56994	-3.9277	-3.9200	-0.62090 d
2.8877	41.03750	44.68750	71.60000	0.48007	-3.2479	-3.2414	-0.52220 d
3.8503	41.05000	45.65000	71.60000	0.38093	-2.6311	-2.6259	-0.41507 d
4.8129	41.06250	46.61250	71.60000	0.28212	-2.0870	-2.0832	-0.30920 d
5.7755	41.07500	47.57500	71.60000	0.21255	-1.6779	-1.6750	-0.23432 d
6.7381	41.08750	48.53750	71.60000	0.17355	-1.4572	-1.4548	-0.19245 d
7.7006	41.10000	49.50000	71.60000	0.13860	-1.2342	-1.2323	-0.15462 d
8.6632	41.11250	50.46250	71.60000	0.10716	-1.0094	-1.0079	-0.12026 d
9.6258	41.12500	51.42500	71.60000	0.078770	-0.78296	-0.78187	-0.088931 d
10.588	41.13750	52.38750	71.60000	0.053040	-0.55515	-0.55442	-0.060245 d
11.551	41.15000	53.35000	71.60000	0.029652	-0.32617	-0.32576	-0.033885 d
12.514	41.16250	54.31250	71.60000	0.0083334	-0.096167	-0.096051	-0.0095816 d
13.476	41.17500	55.27500	71.60000	0.0	0.0	0.0	0.0 d
14.439	41.18750	56.23750	71.60000	0.0	0.0	0.0	0.0 d
15.401	41.20000	57.20000	71.60000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: West

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	58.70000	19.40000	77.00000	-14.471	0.10191	-0.26905	14.468 d
0.97532	58.72500	20.37500	77.00000	-14.450	0.10176	-0.26866	14.448 d
1.9506	58.75000	21.35000	77.00000	-14.429	0.10162	-0.26828	14.427 d
2.9260	58.77500	22.32500	77.00000	-14.409	0.10147	-0.26790	14.407 d
3.9013	58.80000	23.30000	77.00000	-14.388	0.10133	-0.26752	14.386 d
4.8766	58.82500	24.27500	77.00000	-14.368	0.10118	-0.26714	14.366 d
5.8519	58.85000	25.25000	77.00000	-14.347	0.10104	-0.26676	14.345 d
6.8272	58.87500	26.22500	77.00000	-14.327	0.10089	-0.26638	14.325 d
7.8026	58.90000	27.20000	77.00000	-14.307	0.10075	-0.26600	14.304 d
8.7779	58.92500	28.17500	77.00000	-14.286	0.10061	-0.26562	14.284 d
9.7532	58.95000	29.15000	77.00000	-14.266	0.10046	-0.26524	14.264 d
10.729	58.97500	30.12500	77.00000	-14.245	0.10032	-0.26486	14.243 d
11.704	59.00000	31.10000	77.00000	-11.149	-1.8581	-2.1433	11.098 d
12.679	59.02500	32.07500	77.00000	-9.4420	-4.6040	-4.8445	9.3209 d
13.654	59.05000	33.05000	77.00000	-7.5138	-6.0356	-6.2263	7.3566 d
14.630	59.07500	34.02500	77.00000	-6.0053	-6.6889	-6.8406	5.8319 d
15.605	59.10000	35.00000	77.00000	-4.9109	-6.9703	-7.0939	4.7306 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	59.15000	35.00000	77.00000	-4.9431	-6.9047	-4.9431	-6.9047 d
0.96667	60.11667	35.00000	77.00000	-5.3385	-5.7059	-5.3385	-5.7059 d
1.9333	61.08333	35.00000	77.00000	-5.5292	-4.7860	-5.5292	-4.7860 d
2.9000	62.05000	35.00000	77.00000	-5.5654	-4.0476	-5.5654	-4.0476 d
3.8667	63.01667	35.00000	77.00000	-5.4332	-3.4071	-5.4332	-3.4071 d
4.8333	63.98333	35.00000	77.00000	-5.1875	-2.8591	-5.1875	-2.8591 d
5.8000	64.95000	35.00000	77.00000	-4.8656	-2.3921	-4.8656	-2.3921 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	65.00000	35.00000	77.00000	-4.8474	-2.3699	2.4177	-4.8237 d
1.0100	64.99000	33.99000	77.00000	-5.3982	-2.0356	2.0889	-5.3778 d
2.0201	64.98000	32.98000	77.00000	-5.8970	-1.5629	1.6212	-5.8813 d
3.0301	64.97000	31.97000	77.00000	-6.3042	-0.96285	1.0252	-6.2943 d
4.0402	64.96000	30.96000	77.00000	-6.5818	-0.26445	0.32960	-6.5788 d
5.0502	64.95000	29.95000	77.00000	-8.5053	0.059896	0.024313	-8.5055 d
6.0603	64.94000	28.94000	77.00000	-8.5077	0.059913	0.024320	-8.5079 d
7.0703	64.93000	27.93000	77.00000	-8.5101	0.059930	0.024327	-8.5103 d
8.0804	64.92000	26.92000	77.00000	-8.5125	0.059947	0.024334	-8.5127 d
9.0904	64.91000	25.91000	77.00000	-8.5149	0.059964	0.024341	-8.5151 d
10.100	64.90000	24.90000	77.00000	-8.5173	0.059981	0.024347	-8.5174 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - Mid

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	64.95000	24.90000	77.00000	-8.4758	0.059689	-7.2986	-4.3096 d
0.58310	65.45000	24.60000	77.00000	-8.0638	0.056787	-6.9439	-4.1001 d
1.1662	65.95000	24.30000	77.00000	-7.6595	0.053940	-6.5957	-3.8945 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - South

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	66.00000	24.30000	77.00000	-7.6196	0.053659	0.37704	-7.6104 d
1.0617	65.94000	23.24000	77.00000	-7.6615	0.053954	0.37911	-7.6523 d
2.1234	65.88000	22.18000	77.00000	-7.7035	0.054250	0.38118	-7.6942 d
3.1851	65.82000	21.12000	77.00000	-7.7455	0.054546	0.38327	-7.7362 d
4.2468	65.76000	20.06000	77.00000	-7.7876	0.054842	0.38535	-7.7783 d
5.3085	65.70000	19.00000	77.00000	-7.8298	0.055140	0.38744	-7.8204 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: South

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	Horizontal displacement along the Line [mm]	Horizontal displacement perpendicular to Line [mm]	
0.0	58.75000	19.40000	77.00000	-14.414	0.10151	-14.396	-0.73285	d
0.98737	59.73571	19.34286	77.00000	-13.328	0.093862	-13.311	-0.67766	d
1.9747	60.72143	19.28571	77.00000	-12.302	0.086630	-12.286	-0.62545	d
2.9621	61.70714	19.22857	77.00000	-11.328	0.079776	-11.314	-0.57597	d
3.9495	62.69286	19.17143	77.00000	-10.403	0.073264	-10.390	-0.52895	d
4.9368	63.67857	19.11429	77.00000	-9.5222	0.067058	-9.5102	-0.48414	d
5.9242	64.66429	19.05714	77.00000	-8.6795	0.061123	-8.6684	-0.44129	d
6.9116	65.65000	19.00000	77.00000	-7.8701	0.055423	-7.8601	-0.40014	d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: 24 Netherhall Gardens | Sub-structure: Front

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	30.00000	4.70000	71.00000	2.7045	d
0.94000	30.00000	5.64000	71.00000	3.2222	d
1.8800	30.00000	6.58000	71.00000	3.6670	d
2.8200	30.00000	7.52000	71.00000	4.1891	d
3.7600	30.00000	8.46000	71.00000	4.7862	d
4.7000	30.00000	9.40000	71.00000	5.4453	d
5.6400	30.00000	10.34000	71.00000	6.1423	d
6.5800	30.00000	11.28000	71.00000	6.8308	d
7.5200	30.00000	12.22000	71.00000	7.4761	d
8.4600	30.00000	13.16000	71.00000	8.0252	d
9.4000	30.00000	14.10000	71.00000	8.4097	d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	32.00000	15.10000	71.00000	8.9506	d
1.0286	33.02857	15.10000	71.00000	9.1142	d
2.0571	34.05714	15.10000	71.00000	9.2202	d
3.0857	35.08571	15.10000	71.00000	9.2566	d
4.1143	36.11429	15.10000	71.00000	9.2190	d
5.1429	37.14286	15.10000	71.00000	9.1110	d
6.1714	38.17143	15.10000	71.00000	8.9434	d
7.2000	39.20000	15.10000	71.00000	8.7339	d

d - Displacements include imported displacements.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	39.40000	14.20000	71.00000	8.6549	d
0.85000	40.25000	14.20000	71.00000	8.4859	d
1.7000	41.10000	14.20000	71.00000	8.4113	d
2.5500	41.95000	14.20000	71.00000	8.4120	d
3.4000	42.80000	14.20000	71.00000	8.4656	d
4.2500	43.65000	14.20000	71.00000	8.9561	d
5.1000	44.50000	14.20000	71.00000	8.9512	d

d - Displacements include imported displacements.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	44.60000	14.20000	71.00000	8.9506	d
0.99000	44.60000	13.21000	71.00000	8.9960	d
1.9800	44.60000	12.22000	71.00000	8.8443	d
2.9700	44.60000	11.23000	71.00000	8.5324	d
3.9600	44.60000	10.24000	71.00000	8.0942	d
4.9500	44.60000	9.25000	71.00000	7.5606	d
5.9400	44.60000	8.26000	71.00000	6.9599	d
6.9300	44.60000	7.27000	71.00000	6.3175	d
7.9200	44.60000	6.28000	71.00000	5.6560	d
8.9100	44.60000	5.29000	71.00000	4.9950	d
9.9000	44.60000	4.30000	71.00000	4.3515	d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	29.00000	57.20000	71.60000	0.0	d
1.0167	29.00000	56.18333	71.60000	0.0	d
2.0333	29.00000	55.16667	71.60000	0.0	d
3.0500	29.00000	54.15000	71.60000	0.0	d
4.0667	29.00000	53.13333	71.60000	0.0	d
5.0833	29.00000	52.11667	71.60000	0.0	d
6.1000	29.00000	51.10000	71.60000	0.0	d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z [mm]	
Vertical Offset 1					
0.0	30.70000	51.10000	71.60000	0.0093707	d
1.0223	30.68889	50.07778	71.60000	0.036344	d
2.0446	30.67778	49.05556	71.60000	0.054611	d
3.0668	30.66667	48.03333	71.60000	0.24331	d
4.0891	30.65556	47.01111	71.60000	0.70740	d
5.1114	30.64444	45.98889	71.60000	1.1850	d
6.1337	30.63333	44.96667	71.60000	1.6831	d
7.1560	30.62222	43.94444	71.60000	2.2119	d
8.1783	30.61111	42.92222	71.60000	2.7455	d
9.2005	30.60000	41.90000	71.60000	3.2229	d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Dist.	Coordinates x [m]	y [m]	z [m]	Displacements z	

[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	30.65000	41.90000	71.60000	3.2262 d
1.0250	31.67500	41.89000	71.60000	3.3033 d
2.0501	32.70000	41.88000	71.60000	3.3928 d
3.0751	33.72500	41.87000	71.60000	3.5043 d
4.1002	34.75000	41.86000	71.60000	3.6079 d
5.1252	35.77500	41.85000	71.60000	3.7220 d
6.1503	36.80000	41.84000	71.60000	3.8421 d
7.1753	37.82500	41.83000	71.60000	3.9606 d
8.2004	38.85000	41.82000	71.60000	4.0724 d
9.2254	39.87500	41.81000	71.60000	4.1740 d
10.250	40.90000	41.80000	71.60000	4.2633 d

d - Displacements include imported displacements.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	41.00000	41.80000	71.60000	4.2708 d
0.96258	41.01250	42.76250	71.60000	3.7679 d
1.9252	41.02500	43.72500	71.60000	3.2928 d
2.8877	41.03750	44.68750	71.60000	2.8387 d
3.8503	41.05000	45.65000	71.60000	2.4066 d
4.8129	41.06250	46.61250	71.60000	2.0134 d
5.7755	41.07500	47.57500	71.60000	1.6468 d
6.7381	41.08750	48.53750	71.60000	1.2986 d
7.7006	41.10000	49.50000	71.60000	0.98561 d
8.6632	41.11250	50.46250	71.60000	0.69427 d
9.6258	41.12500	51.42500	71.60000	0.41961 d
10.588	41.13750	52.38750	71.60000	0.15503 d
11.551	41.15000	53.35000	71.60000	0.053016 d
12.514	41.16250	54.31250	71.60000	0.021531 d
13.476	41.17500	55.27500	71.60000	0.0 d
14.439	41.18750	56.23750	71.60000	0.0 d
15.401	41.20000	57.20000	71.60000	0.0 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: West

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	58.70000	19.40000	77.00000	8.9507 d
0.97532	58.72500	20.37500	77.00000	8.9516 d
1.9506	58.75000	21.35000	77.00000	8.9524 d
2.9260	58.77500	22.32500	77.00000	8.9531 d
3.9013	58.80000	23.30000	77.00000	8.9537 d
4.8766	58.82500	24.27500	77.00000	8.9543 d
5.8519	58.85000	25.25000	77.00000	8.9548 d
6.8272	58.87500	26.22500	77.00000	8.9552 d
7.8026	58.90000	27.20000	77.00000	8.9556 d
8.7779	58.92500	28.17500	77.00000	8.9559 d
9.7532	58.95000	29.15000	77.00000	8.9561 d
10.729	58.97500	30.12500	77.00000	8.9563 d
11.704	59.00000	31.10000	77.00000	7.4152 d
12.679	59.02500	32.07500	77.00000	7.1101 d
13.654	59.05000	33.05000	77.00000	6.8035 d
14.630	59.07500	34.02500	77.00000	6.6090 d
15.605	59.10000	35.00000	77.00000	6.4901 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	59.15000	35.00000	77.00000	6.4737 d
0.96667	60.11667	35.00000	77.00000	6.1437 d
1.9333	61.08333	35.00000	77.00000	5.8975 d
2.9000	62.05000	35.00000	77.00000	5.6606 d
3.8667	63.01667	35.00000	77.00000	5.3639 d
4.8333	63.98333	35.00000	77.00000	5.0196 d
5.8000	64.95000	35.00000	77.00000	4.6403 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	65.00000	35.00000	77.00000	4.6200 d
1.0100	64.99000	33.99000	77.00000	4.8792 d
2.0201	64.98000	32.98000	77.00000	5.1032 d
3.0301	64.97000	31.97000	77.00000	5.2848 d
4.0402	64.96000	30.96000	77.00000	5.4168 d
5.0502	64.95000	29.95000	77.00000	6.5293 d
6.0603	64.94000	28.94000	77.00000	6.5311 d
7.0703	64.93000	27.93000	77.00000	6.5330 d
8.0804	64.92000	26.92000	77.00000	6.5348 d
9.0904	64.91000	25.91000	77.00000	6.5367 d
10.100	64.90000	24.90000	77.00000	6.5385 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - Mid

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	64.95000	24.90000	77.00000	6.5065 d
0.58310	65.45000	24.60000	77.00000	6.1813 d
1.1662	65.95000	24.30000	77.00000	5.8519 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: East - South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	66.00000	24.30000	77.00000	5.8190 d
1.0617	65.94000	23.24000	77.00000	5.8536 d
2.1234	65.88000	22.18000	77.00000	5.8882 d
3.1851	65.82000	21.12000	77.00000	5.9228 d
4.2468	65.76000	20.06000	77.00000	5.9573 d
5.3085	65.70000	19.00000	77.00000	5.9918 d

d - Displacements include imported displacements.

Structure: Rear Structures | Sub-structure: South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]

Vertical Offset 1

0.0	58.75000	19.40000	77.00000	8.9529 d
0.98737	59.73571	19.34286	77.00000	8.8934 d
1.9747	60.72143	19.28571	77.00000	8.6632 d
2.9621	61.70714	19.22857	77.00000	8.2959 d
3.9495	62.69286	19.17143	77.00000	7.8219 d
4.9368	63.67857	19.11429	77.00000	7.2691 d
5.9242	64.66429	19.05714	77.00000	6.6626 d
6.9116	65.65000	19.00000	77.00000	6.0246 d

d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.3866	Sagging	0.0016910	0.078198	0.078524	-783.70E-6	-550.39E-6	8007.2	2 (Slight)
	2	1.3866	4.1160	Hogging	0.0036960	0.085438	0.086492	-883.50E-6	-740.78E-6	12286.	2 (Slight)
	3	5.5026	3.7974	Sagging	0.0052170	0.082999	0.085688	-863.00E-6	-740.78E-6	4606.1	2 (Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	7.1000	Sagging	0.0055095	421.23E-6	0.0053642	91.610E-6	203.65E-6	14696.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	3.6127	Hogging	0.0058709	-0.074040	0.015189	0.0013633	-577.31E-6	4676.2	0 (Negligible)
	2	3.6127	1.3873	Sagging	0.014336	-0.020276	0.010647	441.76E-6	-577.31E-6	959.83	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	7.9153	Sagging	0.010297	0.095142	0.10520	-0.0011337	667.68E-6	4764.5	2 (Slight)
	2	7.9153	1.8847	Hogging	437.43E-6	0.076701	0.076759	-803.15E-6	667.68E-6	43396.	2 (Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	3.0668	3.9137	Hogging	0.0010016	0.018850	0.019181	-437.20E-6	-517.08E-6	5691.2	0 (Negligible)
	2	6.9806	2.1694	Sagging	0.0013308	0.071833	0.072319	-784.17E-6	-521.54E-6	14391.	1 (Very Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	5.9935	Hogging	629.83E-6	0.010316	0.010630	-205.84E-6	-117.14E-6	71367.	0 (Negligible)
	2	5.9935	4.2065	Sagging	483.73E-6	-0.021349	0.0042779	268.80E-6	-117.14E-6	79316.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	10.588	Hogging	0.0036451	0.045293	0.048323	-752.75E-6	522.06E-6	9138.7	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	11.376	Sagging	0.0084532	-0.010927	0.0027388	0.0019297	0.0015831	2072.6	0 (Negligible)
	2	11.376	4.1739	Hogging	0.0097113	-0.13339	0.027191	0.0027772	0.0015831	2826.5	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	2.1400	Hogging	0.0021793	-0.027749	0.0056868	409.16E-6	341.51E-6	9121.1	0 (Negligible)
	2	2.1400	3.5600	Sagging	0.0023341	0.017922	0.020579	-332.80E-6	392.26E-6	19505.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	2.1899	Sagging	0.0010109	-0.040947	0.0082075	590.42E-6	-256.69E-6	24081.	0 (Negligible)
	2	2.1899	2.2468	Hogging	0.013686	-0.058362	0.014154	689.17E-6	-0.0011017	4863.6	0 (Negligible)
	3	4.4366	4.2419	Sagging	0.013496	-0.0043715	0.012719	302.34E-6	-0.0011017	3298.4	0 (Negligible)
	4	8.6786	1.3214	Hogging	0.0	0.0	0.0	0.0	-1.8308E-6	790.11E+6	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.1000	Sagging	178.44E-6	0.060313	0.060387	-608.08E-6	564.54E-6	76124.	1 (Very Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: East - South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	5.2500	Sagging	1.3566E-6	195.96E-6	197.88E-6	-1.9670E-6	-32.595E-6	36.246E+6	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	6.8500	Sagging	0.0086247	0.094673	0.10764	-0.0010968	645.57E-6	5458.7	2 (Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0052170	0.085438	-740.78E-6	8.3688	0.086492	-883.50E-6	-740.78E-6	12286.	4606.1	2 (Slight)

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0055095	421.23E-6	203.65E-6	9.2565	0.0053642	91.610E-6	203.65E-6	-	14696.	0 (Negligible)

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.014336	-0.074040	-577.31E-6	8.9561	0.015189	0.0013633	-577.31E-6	4676.2	959.83	0 (Negligible)

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.010297	0.095142	667.68E-6	8.9946	0.10520	-0.0011337	667.68E-6	43396.	4764.5	2 (Slight)

Vertical Offset from Line for Vertical	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement	Maximum Gradient of Vertical Displacement	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0013308	0.071833	-521.54E-6	3.1993	0.072319	-784.17E-6	-521.54E-6	5691.2	14391.	1 (Very Slight)

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	629.83E-6	-0.021349	-117.14E-6	4.2589	0.010630	268.80E-6	-117.14E-6	71367.	79316.	0 (Negligible)

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0036451	0.045293	522.06E-6	4.2708	0.048323	-752.75E-6	522.06E-6	9138.7	-	0 (Negligible)

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0097113	-0.13339	0.0015831	8.9563	0.027191	0.0027772	0.0015831	2826.5	2072.6	0 (Negligible)

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0023341	-0.027749	392.26E-6	6.4737	0.020579	409.16E-6	392.26E-6	9121.1	19505.	0 (Negligible)

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.013686	-0.058362	-0.0011017	6.5384	0.014154	689.17E-6	-0.0011017	4863.6	3298.4	0 (Negligible)

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	178.44E-6	0.060313	564.54E-6	6.5065	0.060387	-608.08E-6	564.54E-6	-	76124.	1 (Very Slight)

Structure: Rear Structures | Sub-structure: East - South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	1.3566E-6	195.96E-6	-32.595E-6	5.9899	197.88E-6	-1.9670E-6	-32.595E-6	-	36.246E+6	0 (Negligible)

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Maximum Gradient of Horizontal Displacement Curve	Maximum Gradient of Vertical Displacement Curve	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0086247	0.094673	645.57E-6	8.9529	0.10764	-0.0010968	645.57E-6	-	5458.7	2 (Slight)

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
				[m]	[m]			[mm]	[%]	[m]	[m]	
24 Netherhall Gardens	Maximum Slope	Front	2	1.3866	5.5026	Hogging	**740.78E-6**	6.0404	0.086492	12286.	-	2 (Slight)
	Maximum Settlement	Side	1	0.0	7.1000	Sagging	203.65E-6	**9.2565**	0.0053642	-	14696.	0 (Negligible)
	Max. Tensile Strain	Rear	1	0.0	7.9153	Sagging	667.68E-6	8.9946	**0.10520**	-	4764.5	2 (Slight)
	Min. Radius of Curvature (Hogging)	Front	2	1.3866	5.5026	Hogging	740.78E-6	6.0404	0.086492	**12286.**	-	2 (Slight)

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Maximum Slope	Maximum Settlement	Max. Tensile Strain	Min. Radius of Curvature (Hogging)	Min. Radius of Curvature (Sagging)	Damage Category
	Min. Radius of Curvature (Sagging)	Front	3	5.5026	9.3000	Sagging	740.78E-6	8.3688	0.085688	-	**4606.1**	2 (Slight)
24 netherhall Gardens	Maximum Slope	Rear Side	1	0.0	3.6127	Hogging	**577.31E-6**	8.6549	0.015189	4676.2	-	0 (Negligible)
	Maximum Settlement	Rear Side	2	3.6127	5.0000	Sagging	577.31E-6	**8.9561**	0.010647	-	959.83	0 (Negligible)
	Max. Tensile Strain	Rear Side	1	0.0	3.6127	Hogging	577.31E-6	8.6549	**0.015189**	4676.2	-	0 (Negligible)
	Min. Radius of Curvature (Hogging)	Rear Side	1	0.0	3.6127	Hogging	577.31E-6	8.6549	0.015189	**4676.2**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Rear Side	2	3.6127	5.0000	Sagging	577.31E-6	8.9561	0.010647	-	**959.83**	0 (Negligible)
28 Netherhall Gardens	Maximum Slope	Rear	1	0.0	10.588	Hogging	**522.06E-6**	4.2708	0.048323	9138.7	-	0 (Negligible)
	Maximum Settlement	Rear	1	0.0	10.588	Hogging	522.06E-6	**4.2708**	0.048323	9138.7	-	0 (Negligible)
	Max. Tensile Strain	Front South	2	6.9806	9.1500	Sagging	521.54E-6	3.1993	**0.072319**	-	14391.	1 (Very Slight)
	Min. Radius of Curvature (Hogging)	Front South	1	3.0668	6.9806	Hogging	517.08E-6	2.1212	0.019181	**5691.2**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	Front South	2	6.9806	9.1500	Sagging	521.54E-6	3.1993	0.072319	-	**14391.**	1 (Very Slight)
Rear Structures	Maximum Slope	West	1	0.0	11.376	Sagging	**0.0015831**	8.9563	0.0027388	-	2072.6	0 (Negligible)
	Maximum Settlement	West	1	0.0	11.376	Sagging	0.0015831	**8.9563**	0.0027388	-	2072.6	0 (Negligible)
	Max. Tensile Strain	South	1	0.0	6.8500	Sagging	645.57E-6	8.9529	**0.10764**	-	5458.7	2 (Slight)
	Min. Radius of Curvature (Hogging)	West	2	11.376	15.550	Hogging	0.0015831	7.9330	0.027191	**2826.5**	-	0 (Negligible)
	Min. Radius of Curvature (Sagging)	West	1	0.0	11.376	Sagging	0.0015831	8.9563	0.0027388	-	**2072.6**	0 (Negligible)

Specific Building Damage Results - All Combined Segments

Structure: 24 Netherhall Gardens | Sub-structure: Front

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 netherhall Gardens | Sub-structure: Rear Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 24 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Front North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Front South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Side

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 28 Netherhall Gardens | Sub-structure: Rear

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

Vertical Offset from Line for Vertical	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - Mid

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Rear Structures | Sub-structure: East - South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

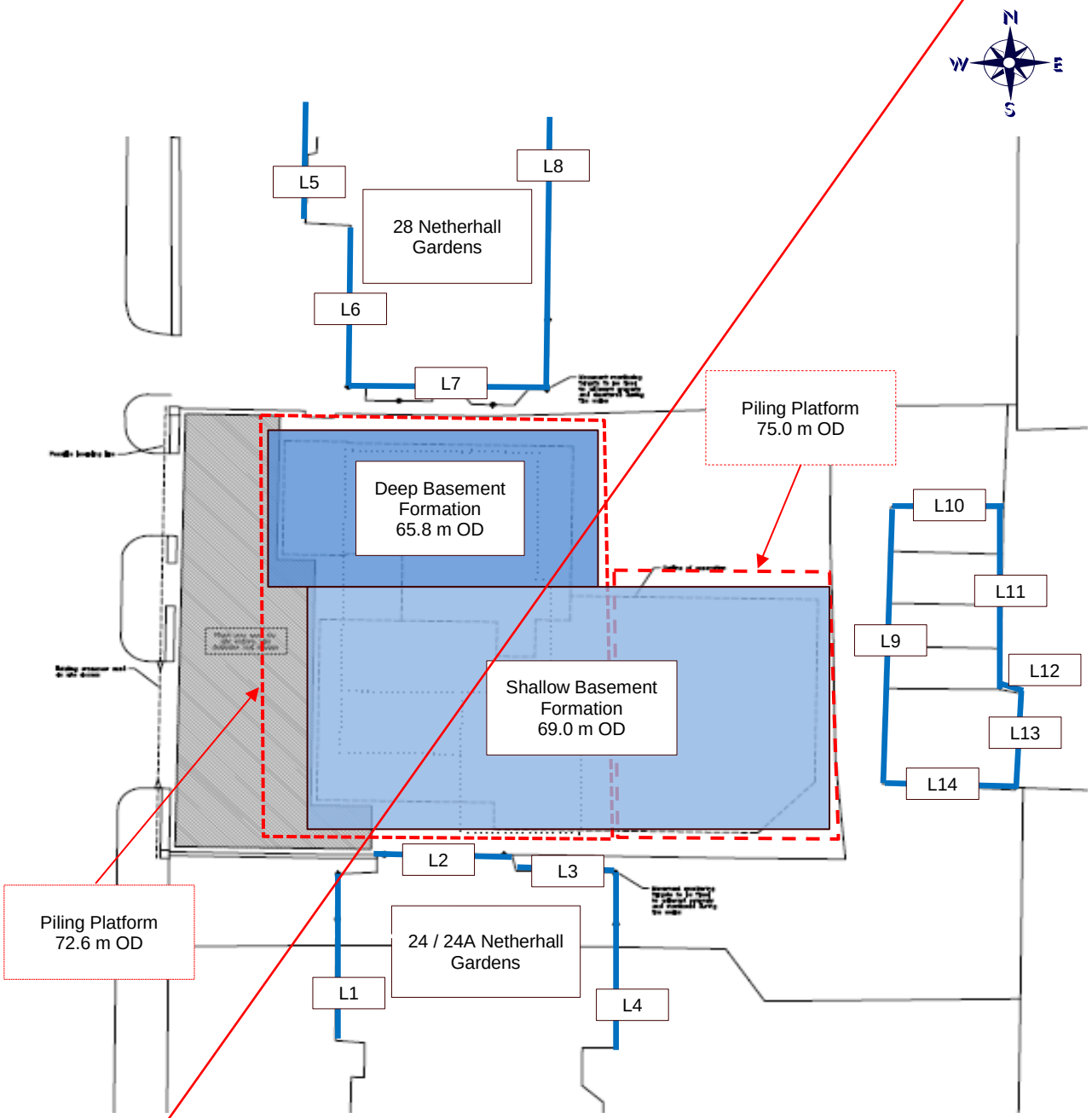
No structures have segments combined.

Structure: Rear Structures | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature Ratio	Deflection Ratio	Average Horizontal Strain	Max. Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

GEA Geotechnical & Environmental Associates	Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Ground Movement Analysis Site Plan**	
Site	26 Netherhall Gardens, London, NW3 5TL	**Job Number**	J15344
Client	Atlas Property Company Limited	**Sheet**	1 / 1
Engineer	Sinclair Johnston		



GEA Geotechnical & Environmental Associates

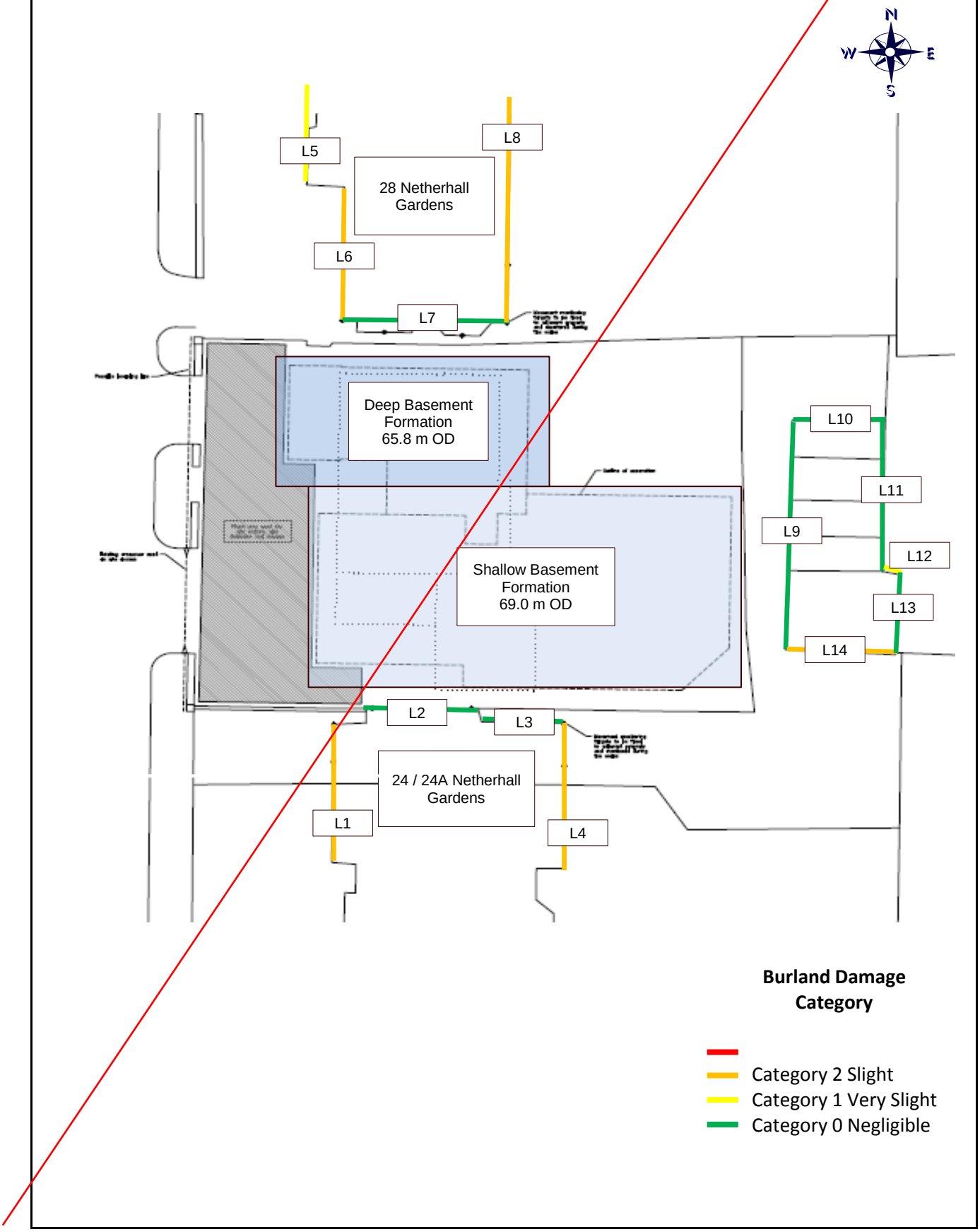
Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Damage Category Plan

Site	26 Netherhall Gardens, London, NW3 5TL
Client	Atlas Property Company Limited
Engineer	Sinclair Johnston

Job Number J15344

Sheet 1 / 1



Geotechnical & Environmental Associates (GEA)
is an engineer-led and client-focused independent specialist providing a complete range of geotechnical and contaminated land investigation, analytical and consultancy services to the property and construction industries.

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where information can be found on all of the services that we offer.

GEA Geotechnical & Environmental Associates

APPENDIX D - OTHER REPORTS (STRUCTURAL DESIGN AND CONSTRUCTION STATEMENT)

SinclairJohnston

26 NETHERHALL GARDENS, NW3

Structural Design and Construction Statement

For

Savills on behalf of Atlas

Project Number: 8240

Date: October 2018

Sinclair Johnston & Partners Ltd, 93 Great Suffolk Street, London, SE1 0BX
T: 020 7593 1900 www.sinclairjohnston.co.uk

REVISION SCHEDULE

Revision	Issue Date	Comments
-	23.07.14	Original document – Issued for planning
A	15.01.16	Original document – Responses to BIA audit by Campbell Reith
B	17.01.17	Original document – Text amendments
C	02.10.18	Revised scheme – Issued for planning
D	18.02.19	Revised reduced scheme
E	08.03.19	Revised to architect comments

DETAILS

Project Name: 26 Netherhall Gardens

Project Number: 8240

Doc. Reference: 8240 Structural Design and Construction Statement

Prepared by: Oliver Roworth BSc, Anthony Puopolo CP Eng MIEAust

Reviewed by: Richard Thiemann MA CEng MICE MIStructE MCIHT

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3. SITE GROUND CONDITIONS

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APPENDICES

APPENDIX A Existing Building and Survey Drawings

APPENDIX B Proposed Drawings

APPENDIX C Indicative Temporary Works Proposals

1. INTRODUCTION

The following Structural Design & Construction Statement has been prepared as part of the wider Basement Impact Assessment (BIA) undertaken for the planning application, submitted by Squire and Partners, for the proposed residential redevelopment at 26 Netherhall Gardens, London, NW3 5TL.

During the course of obtaining planning, the scheme has been significantly reduced. This report is a succession of the previously issued Structural Design and Construction Statement for the new scheme. However, the site investigation and ground movement analysis reports are from a previous BIA submission. The basement has been significantly reduced in size by approx. 50% in depth and 75% on plan, however, the reports in the Appendix are still based on the larger basement in the original submission. The reports have not been updated as the impact of the smaller basement on the geology, hydrogeology, hydrology, flooding and ground movements will be greatly reduced from the acceptable limits stated in the report.

The purpose of this report is to describe the existing site and ground conditions, to present the structural scheme to be adopted for the proposed development, and to describe the proposed construction methodology for the execution of the works. The report and information contained within has been prepared for planning purposes only.

This report should be read with Sinclair Johnston & Partners Basement Impact Assessment (BIA) report and all other Consultant's reports produced for the planning application.

The original report had been prepared by Mr Thomas Musson BEng CEng MIStructE; Technical Director at Sinclair Johnston & Partners and subsequently updated by Oliver Roworth BSc for the revised proposals.

2. EXISTING SITE AND BUILDINGS

Existing building and survey drawings describing the existing site and buildings have been provided in Appendix A.

a) The site address is 26 Netherhall Gardens, London, NW3 5TL and is located at approximate National Grid reference 550453 178948.

b) The site is located within the London Borough of Camden within the Frognal & Fitzjohns ward (See Figure 1).

c) The property is not listed but lies within the Netherhall and Fitzjohns Conservation area.

d) The existing property is believed to have been constructed around 1879 to 1888. A modern garage and extension was added in the late 1950's.

e) The land around the site is occupied by large detached residential houses along both sides of Netherhall Gardens and the general area is residential in nature, although there are various retail outlets along Finchley road approximately 200m west of the site.

f) There are several Network Rail train tunnels, the Belsize Old and New tunnels some 100m to the north and 100m to the south of the site. These tunnels run approximately North-east to South-west. These tunnels are not significant in respect to the proposed development. Please see map opposite showing the locations of these tunnels (See Figure 4).

g) A site visit has been undertaken to ascertain the structural make-up of the buildings and the general site arrangement (Refer to BIA document for photo and drawing references). The site comprises:

- A three-storey detached property (26 Netherhall Gardens) arranged over lower ground floor, raised ground floor, first floor and attic storey.
- The property has been converted into flats at some point in the past and a modern garage with extension over built to the right of the property.
- The local area is on a hillside setting sloping down in a generally east-west direction toward Finchley Road (See Figure 3).
- The lower ground floor is raised some 1.0m to 1.5m from general street level with the ground floor level being some 3.5m to 4.0m above general street level.
- The property has a raised front garden with steps up to the ground floor entrance and a modern hard standing front drive to the left of the property giving level access to Netherhall Gardens.
- The rear garden gently slopes up from a rear light well to the rear boundary.
- The site is bounded to the left by 28 Netherhall Gardens, to the right by 24A & 24 Netherhall Gardens, to the rear by single storey outbuildings understood to belong to 47 Maresfield Gardens and to the front by Netherhall Gardens road.
- Access onto site is directly off Netherhall Gardens.
- There are several mature trees within the rear and front gardens.

h) Existing structure generally comprises a loadbearing masonry frame with timber floors and roof.

i) Based on SAS investigations, the existing shallow strip foundations generally comprise corbelled brick footings on a mass concrete base and typically range from 610mm – 1500+mm BGL to underside of footings.

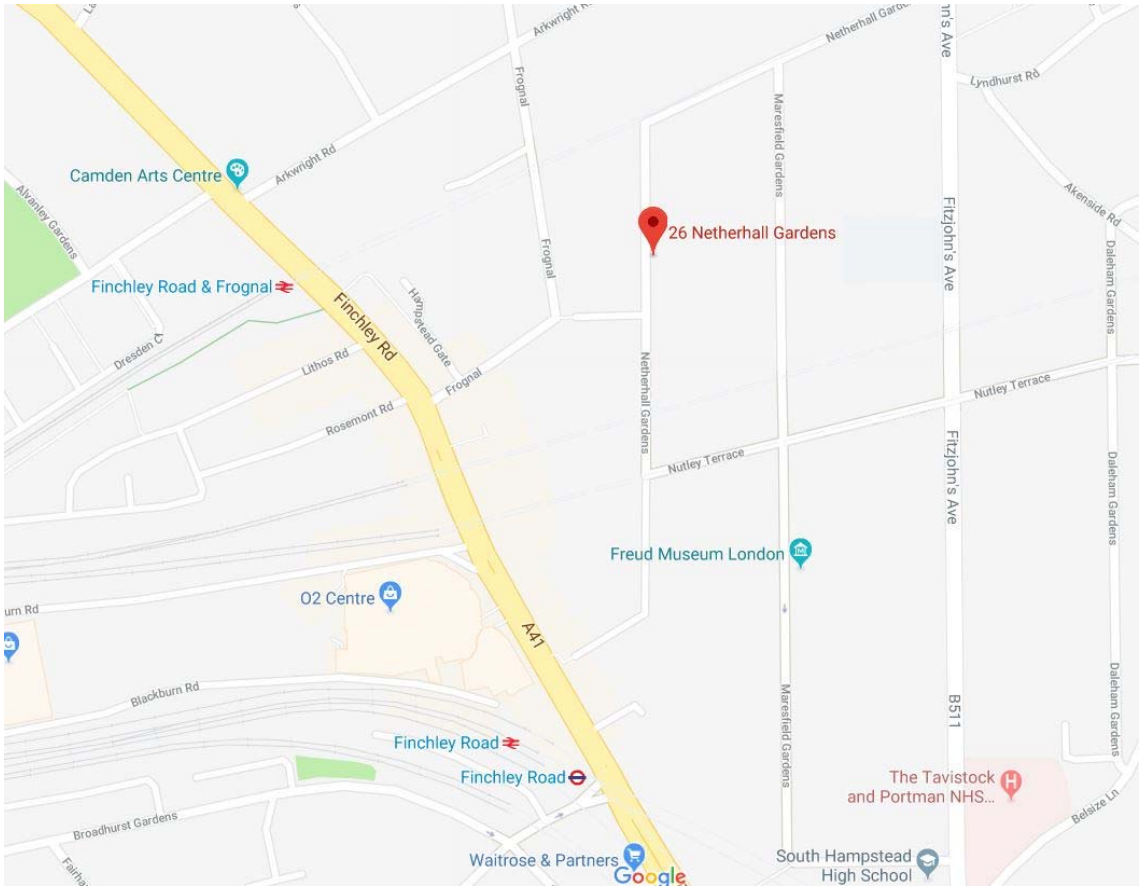


Figure 1. Site Location Map

Figure 2. Aerial View of Site looking North

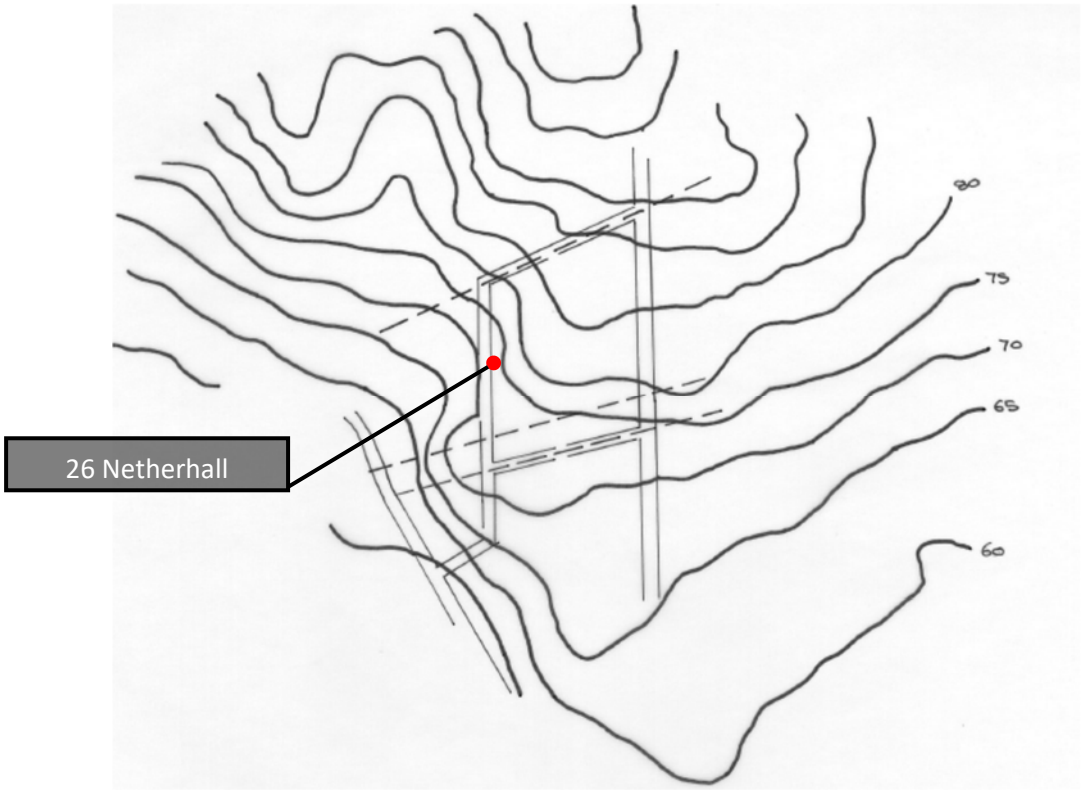


Figure 3 - Approximate Ground Contours

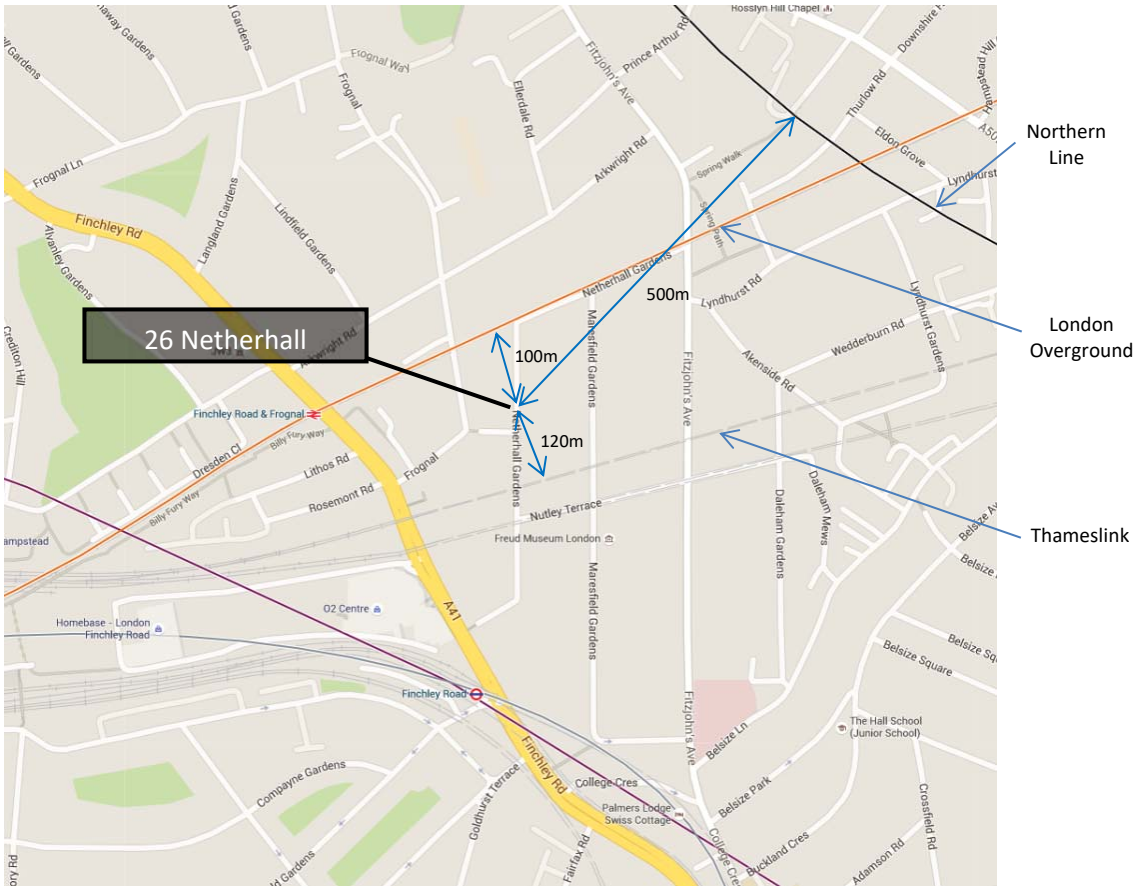


Figure 4 – Map of Nearby Below Ground Tunnels

3. SITE GROUND CONDITIONS

The following is a brief description of the site ground conditions. Reference should be made to Site Analytical Services 'Phase 1 Preliminary Risk Assessment' (Ref. 14/22068-1) and 'Report on a Ground Investigation' (Ref. 14/22068) for detailed information. The SAS report has be summarised in more detail in SJP BIA document.

3.1. Summary of Ground Conditions

The site is classified by the Environment Agency as 'non-productive' strata.

In summary the site ground profile comprises:

Strata	Depth BGL (m)	Ground Water (m BGL)	Angle of Shearing Resistance (ǿ)	Bulk Unit Weight kN/m³	BH1 Allowable Bearing Pressure (kpa)
Made Ground	0.00 – 1.50	1.14-1.88	-°	20	-
Weathered London Clay	0.12 – 9.20		21°	20	65* @ 2.25m BGL 108* @ 4.25m BGL 100* @ 6.75m BGL
Un-weathered London Clay	6.00 – 20.00+		21°	20	125* @ 9.75m BGL

Figure 5 – Summary of Ground Conditions

*Based on a factor of 3 against soil compressive capacity given in SAS report

3.2. Contamination

The results of the laboratory analysis indicate that the made ground contains elevated concentrations of Benzo(a)pyrene, Benzo(a)anthracene and Benzo(a)fluoranthene indicated in a distinct hotspot of contamination in Trail Pit 4, which exceed the residential end-user protection limit. SAS state, remedial measures to protect human health are considered necessary as part of the development at the site to break exposure pathways for the localised area of contamination.

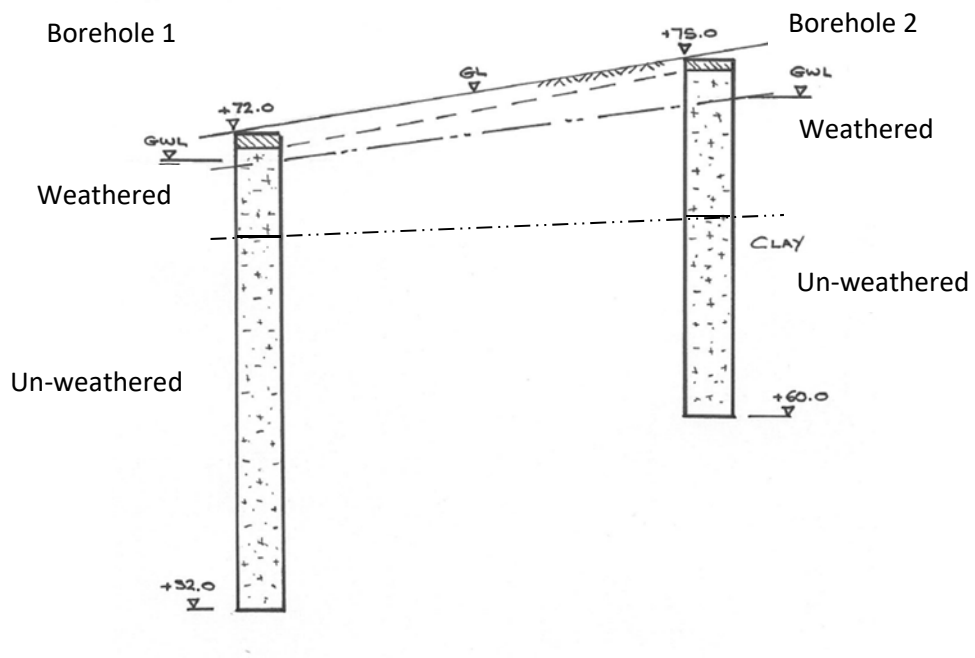


Figure 5 – Indicative Borehole Logs

4. PROPOSED DEVELOPMENT

4.1. The proposed revised development comprises constructing a new 3 storey extension and basement to the side of the main house building for a new apartment block. The structural proposals generally comprise:

a) Demolition of existing side extension

b) Partial single storey basement construction under the new extension to the side of the existing main house building comprising secant piled walls and underpinning to the main house building

c) New 3 storey loadbearing masonry superstructure with precast concrete floors and timber roof

d) Re-profiling of the front garden and sideway adjacent to No. 24 Netherhall Gardens.

The specific structural proposals are set out in Section 5 of this report.

5. STRUCTURAL PROPOSALS

5.1. Description of Proposed Structure

Drawings and mark-ups describing the structural proposals have been provided in Appendix B.

The structural works can be divided into substructure (structure below ground) and superstructure (structure above ground).

The substructure comprises

a) Secant (hard / firm) bored piled retaining walls to the perimeter of the basement providing temporary and permanent earth support.

b) Concrete underpinning to the flank wall of 26 Netherhall Gardens main house building, including transition underpins to the front and rear of the main house, providing temporary earth support and cast independent of the basement structure.

c) A reinforced concrete box structure, acting integral with, the bored piled walls to providing the permanent earth support.

d) Reinforced concrete retaining walls are to be adopted parallell to and set back from the site boundary with 24 Netherhall Gardens and to the rear of the basement to deal with varying levels of ground and adjacent properties.

The superstructure comprises:

a) Traditional cavity loadbearing masonry frame (external walls)

b) Precast concrete planks spanning side to side with a structural topping

c) Timber roof structure

5.2. Structural Stability

Secant piled retaining walls are proposed to the basement perimeter walls. The final design for the embedded retaining structure is to be undertaken by a Specialist Piling Contractor sub-contracted to the Main Contractor. At the pre-planning stage the Main Contractor and their appointed sub-contractors are not appointed. Therefore, preliminary piling designs have been investigated at the planning stage using previous experience and generally the approach set out in CIRIA C580. The form of retaining wall proposed has been successfully used on many similar basement projects and the performance characteristics of such walls in London Clay are well documented and understood.

All retaining structures are to be designed to support the lateral pressures resulting from earth, surcharge and transient hydrostatic loads. Pressures are to be calculated using the geotechnical parameters set out in Site Analytical Services' site investigation report. A design ground water level of -1.0m below the retained earth level is to be adopted for the design of all retaining structures. A minimum surcharge pressure of 10kN/m^2 is to be adopted over and above any adjacent foundation surcharge loads.

The embedded retaining walls are to be propped in the temporary and permanent cases. Temporary propping is to take the form of steel whaler beams, steel flying shores and steel props. Permanent propping is provided by the reinforced concrete ground bearing basement slabs and reinforced concrete suspended floor slabs.

Due to the topography of the site the proposed basement has varying retaining wall heights, summarised as follows:

Location	Retained Ground Level (m)	Lowest Basement Level (m)	Retained Height (m)	Permanent Prop Levels (m)
Front (single storey basement)	+72.62	+66.22	3.20	+72.62 (L Ground floor slab) +66.22 (Basement slab)

Figure 6 – Summary of Retaining Heights

The retaining walls to the sides of the proposed basement are to step along their lengths to accommodate the site slope.

A reinforced concrete cantilever retaining wall will be constructed along the boundary line with No. 24 Netherhall Gardens to accommodate the difference in site levels with sacrificial trench sheeting and propping as required.

The global 'out of balance' forces resulting from the varying retaining heights are to be resisted by the passive earth pressures acting on the opposite basement faces.

The ground investigation found ground water at 1.14m and 1.88m below the existing ground level. These readings are likely due to minor seepages of ground water within permeable Silty lens present within the Clay. A secant piled wall provides a high degree of resistance to any potential inflows of ground water during construction. This will allow the Contractor to construct the basement in a relatively 'dry' environment without the need for significant de-watering.

The excavation required to form the basement results in the removal of the original over-burden pressure. This results in the bottom of the excavation rising a phenomenon commonly known as 'heave'. Initially this heave is unrestrained as the site is an open excavation. During construction of the new building the weight of the new structure resists any on-going heave and the basement slab will be designed to resist the resultant forces.

Structural stability of the superstructure will be provided by the external loadbearing masonry cavity shear walls transferring horizontal load to the ground through the basement foundation. Horizontal wind load will be transferred to the floor structure at each level via shear and bending of the loadbearing masonry panel, the stiff concrete floors will act in diaphragm action to transfer horizontal load to the loadbearing masonry shear walls.

5.3. Ground Movement and Damage Impact Assessment to Neighbouring Properties

GEA Ltd. carried out a Ground Movement Analysis for which the report has been included in SJP's BIA Appendix D, GEA Report Ref. J15344.

a) Description of Neighbouring properties:

24 & 28 Netherhall Gardens are similar in size, scale and form as 26 Netherhall Gardens. The properties appear to have been constructed around the same time and are of load bearing masonry construction most likely with timber floors. No. 24A Netherhall Gardens appears to be a modern addition to No. 24 but again also appears to be of load bearing masonry construction. For the purposes of the category of damage prediction No. 24 & 24A are considered a single structure.

A visual inspection of No's 24, 24A and 28, undertaken from street level, did not identify any apparent defects or evidence of historic movement. Post-planning, as part of the party wall process, a more detailed structural inspection of the adjacent properties including internal inspections will be undertaken prior to completing the detailed ground movement analysis.

b) The GEA report is based on the previous basement proposals with a much larger basement; the revised basement proposal is 50% shallower in most areas and has a reduction in floor area of 75%. The report states:

> 'The analysis has concluded that the predicted damage to the neighbouring properties (as classified under Burland et al 1995) would vary between Category 0 (Negligible) and Category 2 (Slight). On this basis, the damage that would inevitably occur as a result of such an excavation would generally fall within the acceptable limits, with mitigation measures required for those walls predicted to be Category 1 (Very Slight) of higher.'

c) With the significantly reduced basement size, it is expected that the damage categories would lessen due to the revised basement construction, considering similar mitigation methods are proposed in the method of construction to ensure acceptable ground movements.

d) Movement Monitoring:

The Contractor will be required to monitor ground movements and any potential building movements during the works to check the validity of the ground movement analysis and the performance of the temporary works and working methods. A 'traffic light' system of green, amber and red trigger values will be set with specific Contractor actions against each trigger value.

Traffic Light	Trigger Value (mm)		Contractor Action
	Ground	Building	
Green	<10	<5	No action required.
Amber	10-15	5-10	Notify the CA and Party Wall Surveyor(s). Increase frequency of monitoring. Implement contingency measures if movement continues.
Red	≥15	≥10	Notify the CA and the Party Wall Surveyor(s). Implement measures to cease movement and stop work.

Figure 6. Indicative Ground Movement Trigger Values

The monitoring method is to be developed further during detailed design but may take the form of precise levelling, geospatial surveying, inclinometers, tiltmeters or electro level beams, or extensometer's or a combination of these methods. The monitoring will be undertaken prior to installation of the piled walls and continue through to completion of the basement structure.

It is envisaged that the ground movement monitoring will take the form of targets placed on the secant piled wall capping beam (at ground level), spaced 3m apart along the length of the beam. These will be monitored on a weekly basis, against the trigger values noted above.

It is envisaged that the building movement monitoring will take the form of pairs of targets placed on the external walls of nearby buildings (at 1m above ground level and close 1m below roof eaves level), spaced 3m apart along the length of the wall. These will be monitored on a weekly basis, against the trigger values noted above.

5.4. Sustainable Drainage System (SUDS)

The proposals comprise the re-profiling of the existing front and rear gardens resulting in the following changes to total area of soft landscaping present on site:

Existing soft landscaping: 390m^2 (approximately)

Proposed soft landscaping: 310m^2 (approximately)

The proposals therefore result in an increase in the total amount of hard-standing on site with an associated increased volume of surface water runoff. To offset this increase sustainable drainage systems (SUD's) should be considered through design development to final detailed proposals.

The overall drainage system is to be designed and detailed by the appointed drainage designer. At the pre-planning stage this Designer is not appointed. Therefore, for the purposes of this planning stage report a high-level review of the various SUD's technologies has been undertaken and the potential for adoption discussed.

SuD Technology	Potential for Adoption
Living Roofs (Green Roofs)	Given the pitched roof and surrounding architectural environment living roofs would appear not to be feasible.
Recycling / rain water harvesting	Tanks and associated plant for rain water harvesting and reuse could be located within the sub-basement plant room. Rain water harvesting would appear feasible.
Permeable paving and hard standing systems and soakaway systems	Given the clay ground permeable surfacing using 'soak-a-aways' would appear not to be feasible.
On / off line storage	Storage of runoff may be feasible but requires further investigation to ascertain storage volume requirements.
Swales and infiltration basins	Given the site constraints swales and infiltration basins would not appear feasible.
Bioretention and biofiltration	Given the site constraints swales and infiltration basins would not appear feasible.
Permeable conveyance systems	Given the site constraints swales and infiltration basins would not appear feasible.

Figure 7 – Potential SUD's

From the above, it is envisaged that the most appropriate form of SUDs techniques to be adopted will be a combination of rainwater harvesting tanks and storage of rainwater run-off in attenuation tanks on site.

6. PARTY WALLS

The works comprise the excavation for a new basement adjacent to the site boundary and within close proximity to 24A Netherhall Garden. Full procedures under The Party Wall etc Act 1996 are therefore required.

The structural scheme adopted has been designed with due regard to maintaining the structural stability and integrity of neighbouring buildings & structures and surrounding land. The structural form of the basement and the method of construction have been developed to ensure that lateral deflections, and associated ground movements, are kept within acceptable limits. An initial assessment of the predicted ground surface movements using the approach set out in CIRIA C850 has indicated that the predicted category of damage to adjacent properties is not expected to be worse than category 1 – very slight.

7. CONSTRUCTION METHODOLOGY

7.1. Construction Sequence

The proposed sequence of works given below has been assumed for the purposes of undertaking the planning stage structural design of the building and is provided to demonstrate that the works can be executed with due regard to the local amenity.

Proposed Sequence of Works

a) Soft strip to be undertaken including removal of landscaping.

b) Scaffolding to be erected around existing side extension to be demolished and protective hoarding around site.

c) Demolish existing side extension using hand techniques and small items of plant. Construction vehicles to park on-site in front drive.

d) Install movement monitoring equipment to adjacent structures and base line readings to be taken. Regular monitoring to be undertaken throughout the works.

e) Site to be cleared and mass concrete underpins installed to the flank wall of No. 26 Netherhall Gardens with transition underpins to the front and rear external walls.

f) Install piling platform and secant piled walls to be installed using bored piling methods. Firm piles (weak concrete 5-10N/mm2) installed first. Hard piles (reinforced concrete say 35N/mm2) installed second.

g) Once piling is installed in-situ reinforced concrete boundary retaining walls to be constructed. Temporary trench sheets installed to retain the earth locally in the temporary case and allow the walls to be formed.

h) Capping beams to piled walls to be constructed. Monitoring equipment to capping beams to be installed and base line readings taken. Regular monitoring to be undertaken throughout the works.

i) Reduce rear garden terrace are to approximately to +75.20m.

j) Commence excavation of lower ground level. Reduce lower ground level to +70.0m and install temporary propping.

k) Continue excavation down to +68.94m and construct basement slab and RC walls.

l) Construct ground floor reinforced concrete slab.

m) Once slab has achieved its specified 28 day strength props are to be removed.

n) Cast remaining reinforced concrete walls, beams and slabs removing temporary works as 28day strength is achieved. The basement is then complete.

o) Install traditional loadbearing cavity masonry external walls up to 1st floor level and install precast concrete planks. Continued construction in this sequence to the required floor level.

p) Install timber roof.

7.2. Demolition

The proposals comprise the demolition of the existing side building. The demolition works will be required to be undertaken in accordance with the legislative documents stated in section 7.4 and, as stated in Camden

Camden Planning Guidance – Basements (March 2018) Section 5.2, Contractors are to adopt the practices outlined within the ICE Demolition Protocol in order to mitigate the impact of the works.

Where practical demolition material should be taken to recycling plants.

7.3. Temporary Works

The Contractor will be required to appoint a Temporary Works Co-ordinator to advise, design, co-ordinate and oversee all temporary works aspects. All temporary works are to be in accordance with BS 5975 'Code of practice for temporary works procedures and the permissible stress design of falsework'.

The planning stage structural design has highlighted the following specific temporary works that will need to be further developed during detailed design and construction:

a) Temporary lateral propping to the secant piled walls. This propping is required to prevent significant lateral movement of the secant walls. The propping is to be kept in place until the permanent propping (reinforced concrete slabs) are constructed. Traditional steel whaler beams, flying shores and props are indicatively proposed as per 'Indicative Temporary Works' mark-up in Appendix C.

7.4. Construction Generally

a) The works are required to be undertaken in accordance with all statutory legislation relating to construction works.

b) The Contractor will be required to demonstrate a positive attitude and commitment toward minimising environmental disturbance to local residents and will be required to be registered with the Considerate Contractors Scheme.

c) Noise, dust and vibration will be controlled by employing Best Practicable Means (BPM) as prescribed in the following legislative documents and the approved code of practice BS 5228:

- The Control of Pollution Act 1972
- The Health & Safety at Work Act 1974
- The Environmental Protection Act 1990
- Construction (Design and Management) Regulations 1994
- The Clean Air Act 1993

d) General measures to be adopted by the Contractor to reduce noise, dust and vibration include:

- Erection of site hoarding to act as minor acoustic screen.
- Use of super silenced plant where feasible.
- Use of well-maintained modern plant.
- Site operatives to be well trained to ensure that noise minimisation and BPM's are implemented.

- Effective noise and vibration monitoring to be implemented.
- Reducing the need to adopt percussive and vibrating machinery.
- Bored piling techniques to be adopted to reduce piling induced vibration.
- Piles to be broken down using non-percussive techniques.
- Vehicles not to be left idling.
- Vehicles to be washed and cleaned effectively before leaving site.
- All loads entering and leaving the site to be covered.
- Measures to be adopted to prevent site runoff of water or mud.
- Water to be used as a dust suppressant.
- Cutting equipment to use water as suppressant or suitable local exhaust ventilation system.
- Skips to be covered.
- Drop heights to be minimised during deconstruction.
- Use of agreed wet cleaning methods or mechanical road sweepers on all roads around site.
- Set up and monitor effective site monitoring of dust emissions.
- Working hours to be restricted as required by the Local Auhtority.

e) The Contractor will be required to be registered with the Considerate Contractor scheme.

f) The Piling Contractor is to be a registered member of the Federation of Piling Specialists.

g) Impacts on the local amenity will be strictly controlled and managed by the Contractor.

h) Working hours will be restricted as required by the Local Authority.

i) The Contractor will be required to provide a Construction Management Plan prior to undertaking the works. The contents of this plan must be agreed with the Local Authority and complied with unless otherwise agreed with the Council.

j) The Contractor will be required to provide a Site Waste Management Plan describing how site waste is to be minimised and dealt with.

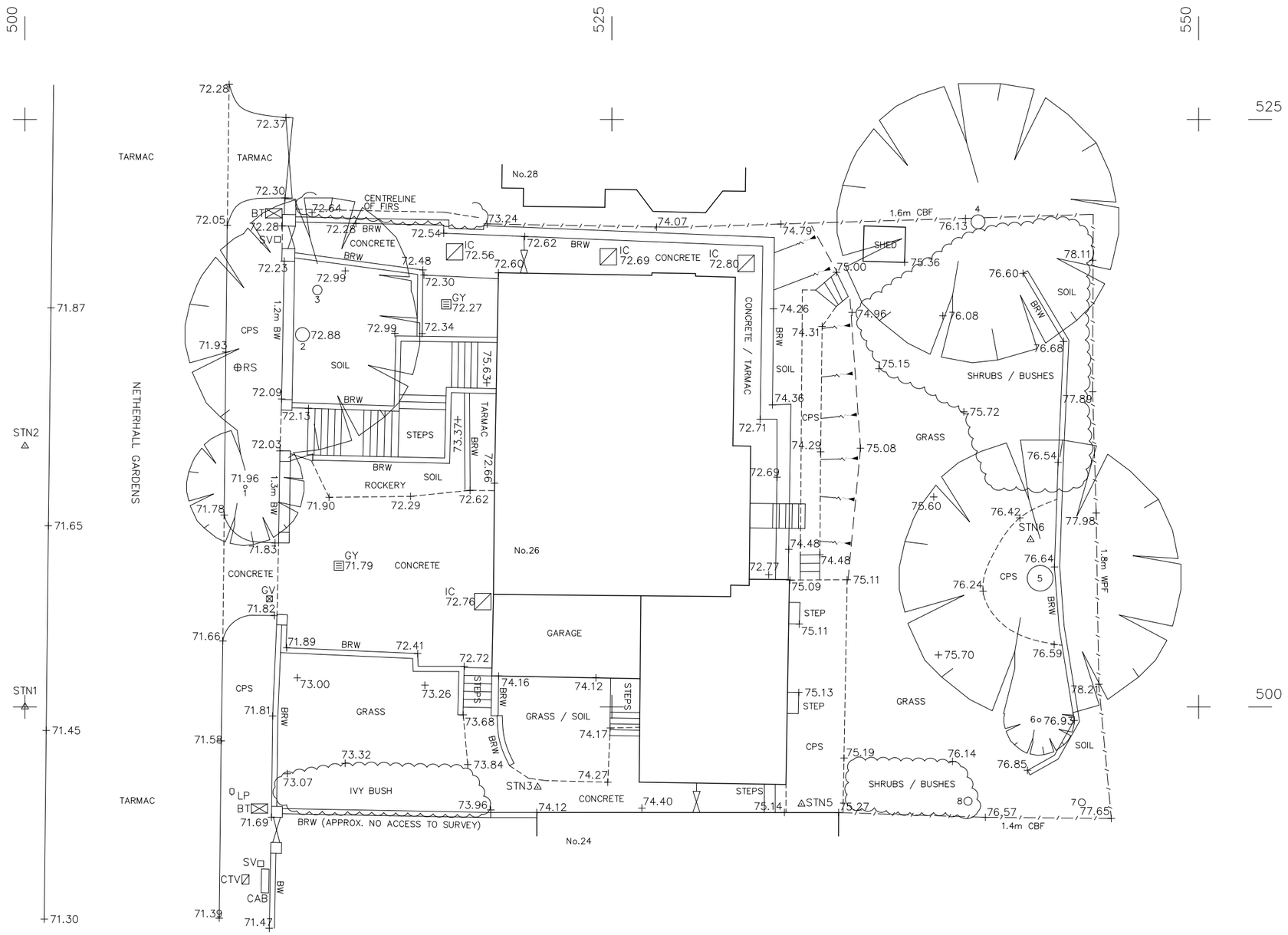
k) Ground water is well below the proposed basement formation level. Therefore, ground water will not be significant during execution.

7.5. Construction Traffic Management Plan

The Contractor will be required to develop a Construction Traffic Management Plan for submission and agreement with the Local Authority. This Traffic Management Plan is to be in accordance with Camden Planning Guidance 6 Section 8.

Refer to planning stage Construction Traffic Management Plan submitted with the planning application for further details.

APPENDIX A - EXISTING BUILDING AND SURVEY DRAWINGS



Important Information:

All survey data has been undertaken by others.

TREE SCHEDULE

NO.	GIRTH (DIA)	SPREAD	HEIGHT	TYPE
1	0.15	5.00	8.00	CHERRY
2	0.60	10.00	8.00	?
3	0.40	8.00	10.00	ASH
4	0.60	12.00	12.00	OAK
5	1.10	12.00	12.00	OAK
6	0.15	3.00	3.00	?
7	0.30	0.00	3.00	?
8	0.35	0.00	4.00	?

Survey Grid: Based to a local arbitrary grid (by others)

Levelling: Relative to OSGB datum

Drawing Title:

GPS Survey

Site Address:

26 Netherhall Gardens
Hampstead NW3

Client:

Stuart Henley & Partners

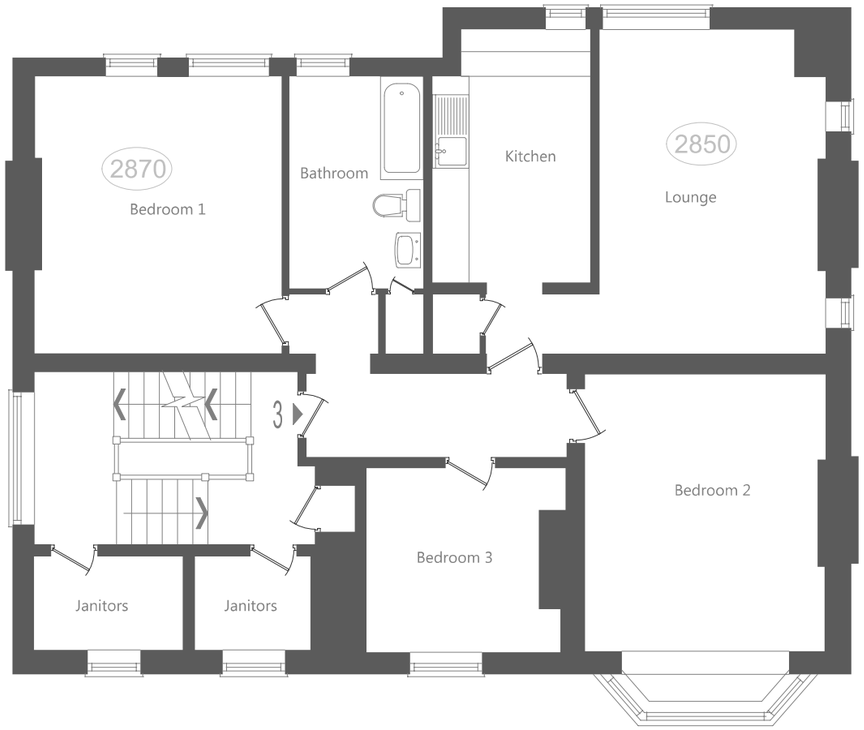
A: Building envelope amended 18-09-13

Surveyor	CD	Drawn By	WB	Verified By	AMF	Date	08.09.13

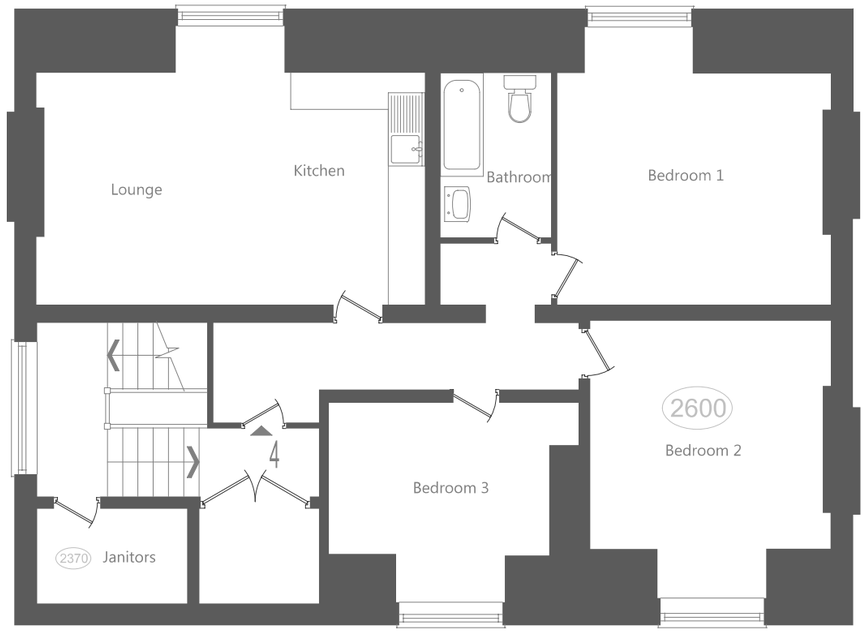
CM No: CM/13413 Rev: A

Scale: 1:100m @ A1 Date: September 2013

Cadmap Ltd
67 Meadway Drive
Horsell, Woking
Surrey, GU21 4TF
T: 01483 429385
E: info@cadmap.co.uk
W: www.cadmap.co.uk



First Floor



Second Floor

First Floor:
Flat 3 NIA = 102.95 Sq. m
Total GIA = 127.46 Sq. m

Second Floor:
Flat 4 NIA = 86.25 Sq. m
Total GIA = 105.17 Sq. m

Pelican
Building Contractors Ltd
4 South Ealing Road W5 4QA
T: 020 8567 2489 F: 020 8566 2961
xenia@pelicancontractors.com

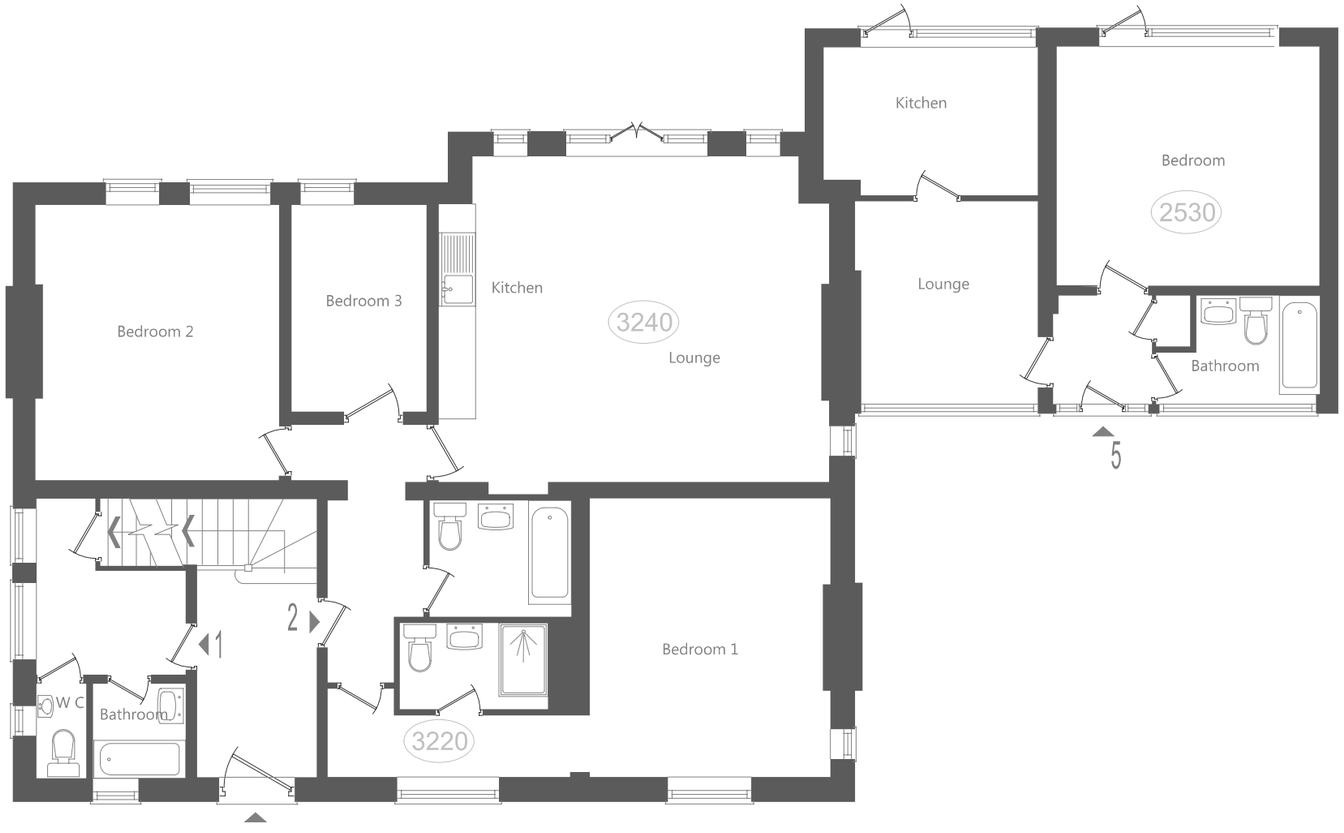
Project
26 Netherhall Gardens
London NW3

Drawing
Survey Floor Plans: Flats 3 & 4
First and Second Floors

Version	Scale	Date
01	A3 1:100	01 05 04

Lower Ground Floor

Upper Ground Floor



Lower Ground Floor:
Flat 1 NIA = 125.21 Sq. m
Total GIA = 125.21 Sq. m

Total Flat 1 NIA = 147.09 Sq. m

Upper Ground Floor:

Flat 1 NIA = 21.88 Sq. m

Flat 2 NIA = 103.77 Sq. m
Flat 5 NIA = 46.57 Sq. m

Total GIA = 172.22 Sq. m

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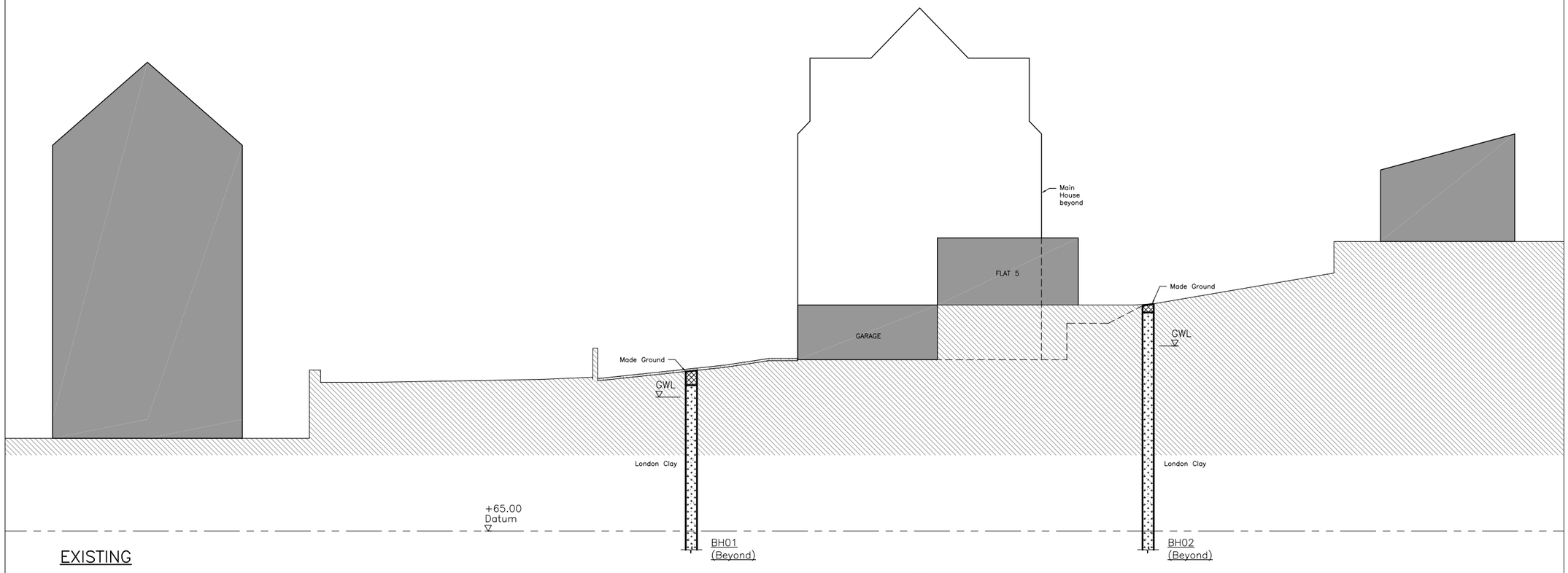
London NW3

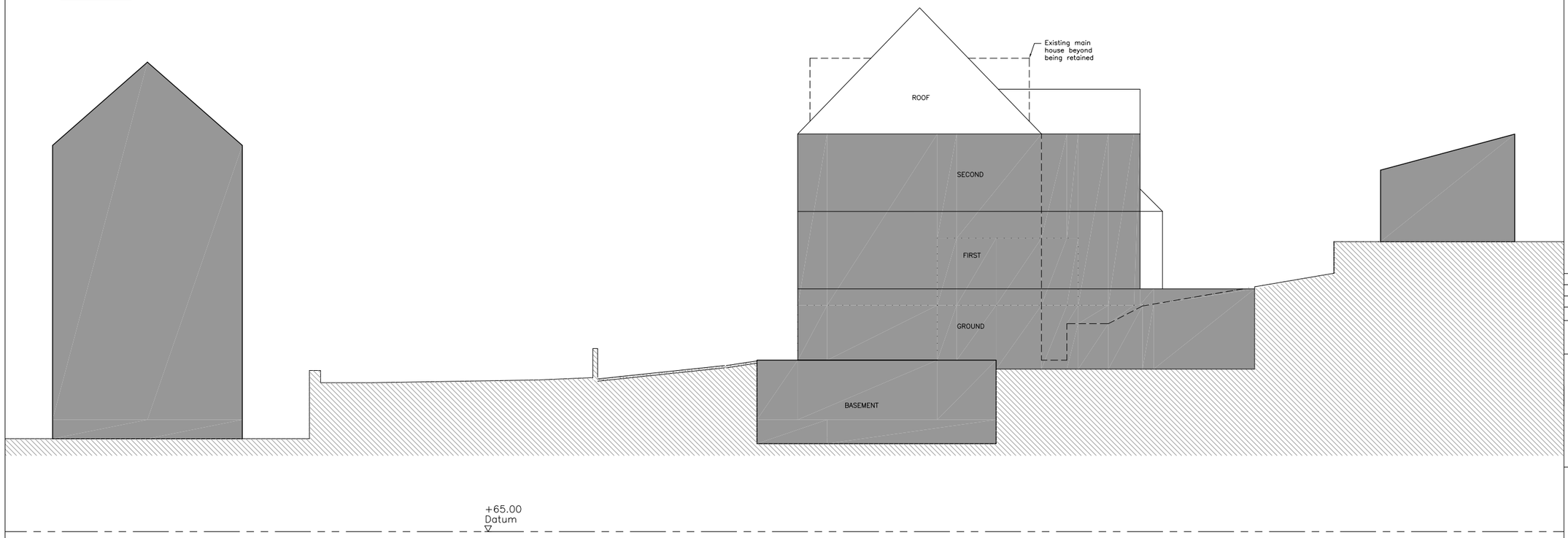
Drawing
Survey Floor Plans: Flats 1, 2 & 5
Lower and Upper Ground Floors

Version	Scale	Date
01	A3 1:100	01 05 04

APPENDIX B - PROPOSED DRAWINGS



EXISTING



PROPOSED

NOTES:

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2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to intended scale this bar should be 50mm long @ A1 or 25mm long @ A3:
3. All dimensions are in millimetres and levels in metres.

Rev	Date	Issued	Amendment
B	18.02.19	OR	Reduced Scheme – Updated for planning.
A	01.10.18	OR	Revised Scheme – Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status *PLANNING*

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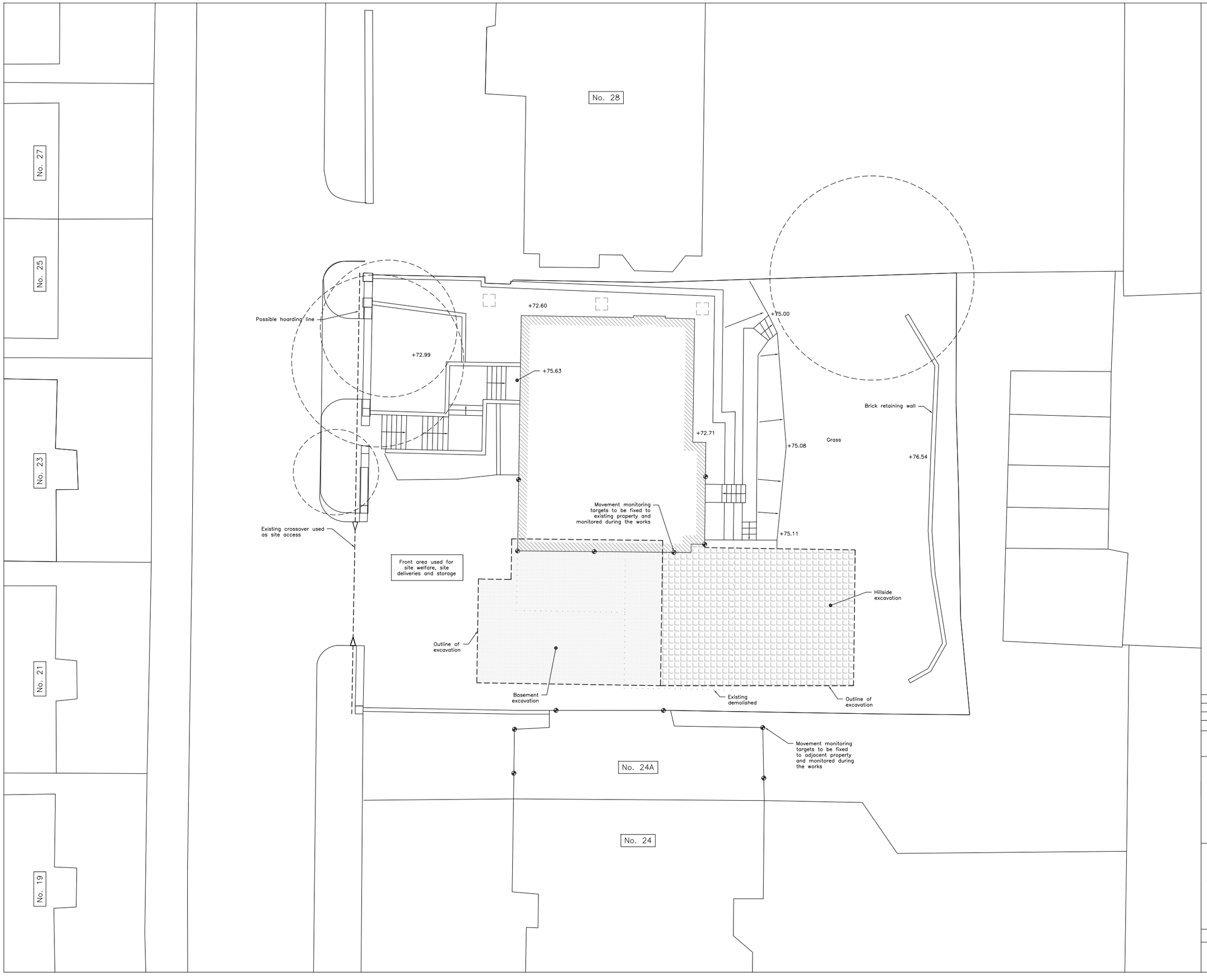
26 NETHERHALL GARDENS NW3

TOPOGRAPHIC SECTION EXISTING AND PROPOSED

Drawn T Musson Scale 1:50 at A1

Project No./Drawing No. 8240/SK01 Rev B



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KEY:

Indicates hillside excavation to approx. +72.100

Indicates basement excavation to approx. +69.000

Rev	Date	Issued	Amendment
B	18.02.19	OR	Reduced Scheme – Issued for planning.
A	01.10.18	OR	Revised Scheme – Issued for planning.
–	23.07.14	TJM	Issued for planning.

Status *PLANNING*

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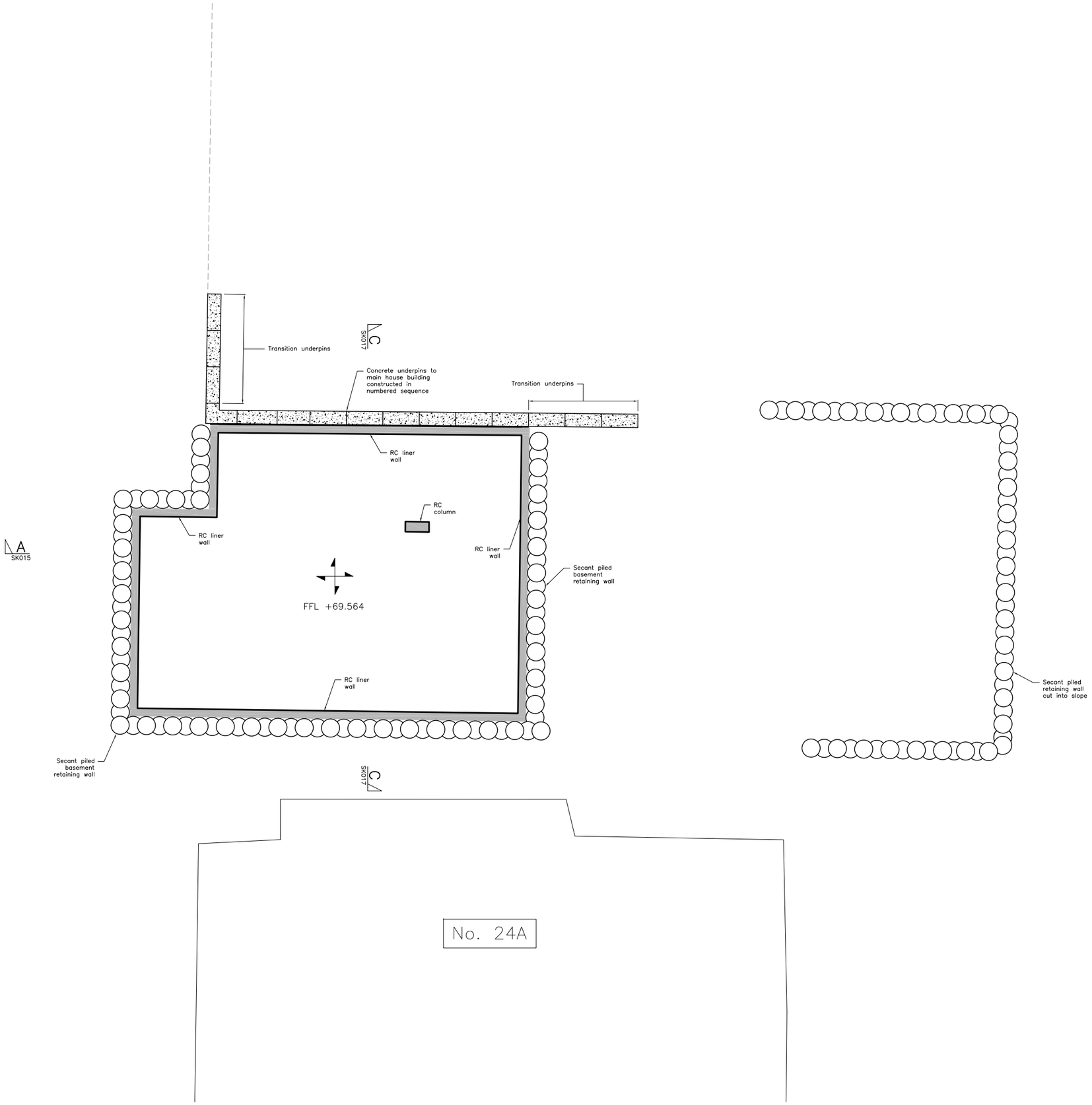
26 NETHERHALL GARDENS NW3

PROPOSED SITE PLAN

Drawn T Musson Scale 1:100 at A1

Project No./Drawing No. 8240/SK04 Rev B



NOTES:

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2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to intended scale this bar should be 50mm long @ A1 or 25mm long @ A3:
3. All dimensions are in millimetres and levels in metres.

KEY:

RC Ground Bearing Raft Slab.

Rev	Date	Issued	Amendment
D	18.02.19	AP	Revised Scheme – Issued for planning.
C	01.10.18	OR	Revised Scheme – Issued for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status

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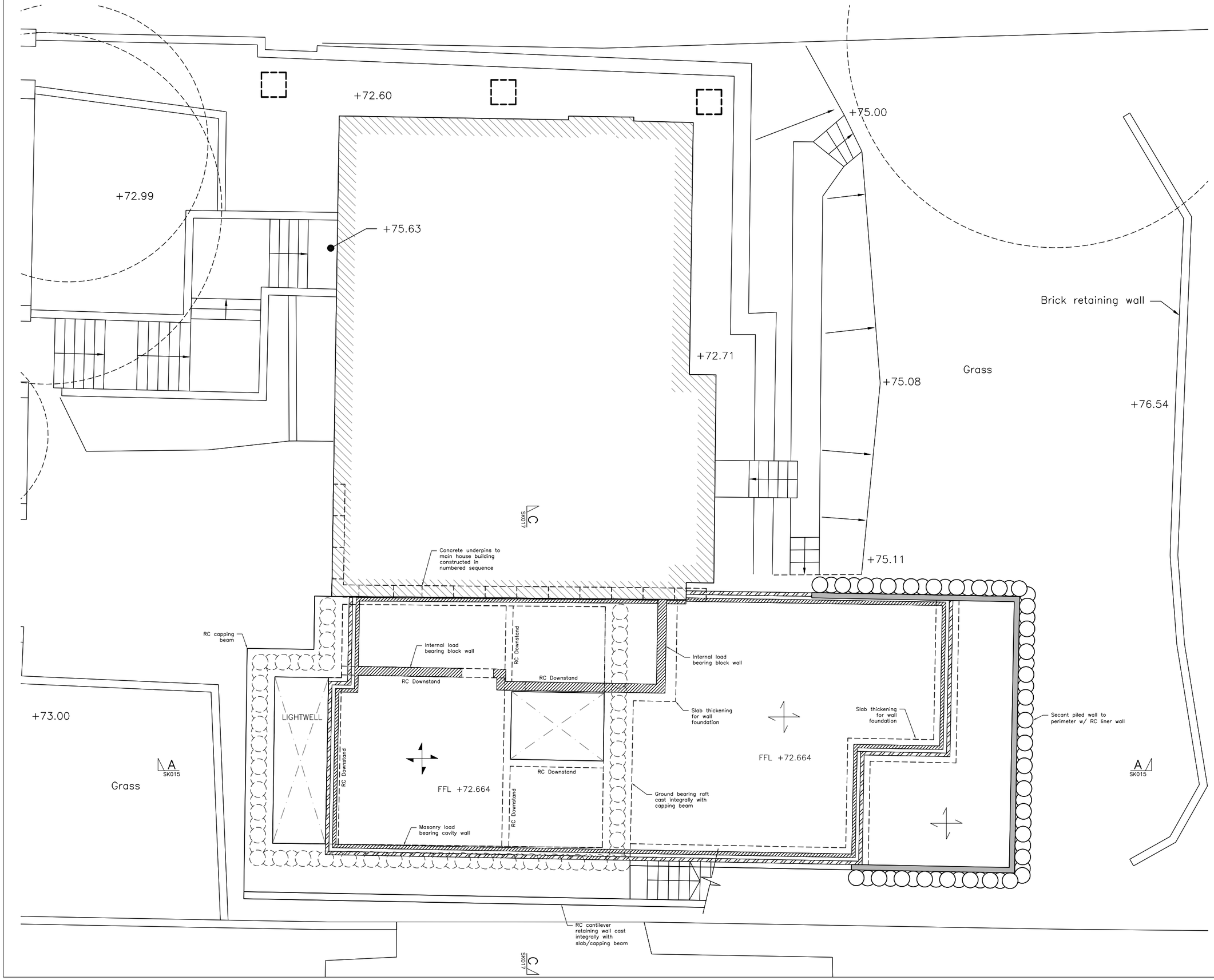
26 NETHERHALL GARDENS NW3

LOWER GROUND GA PLAN

Drawn T Musson Scale 1:50 at A1

Project No./Drawing No. 8240/SK008

Rev D



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KEY:

250thk RC Suspended Slab.

250tck RC Ground Bearing Raft Slab

Rev	Date	Issued	Amendment
E	08.03.19	OR	Reduced Scheme – Issued for planning.
D	18.02.19	AP	Reduced Scheme – Issued for planning.
C	01.10.18	OR	Revised Scheme – Issued for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status *PLANNING*

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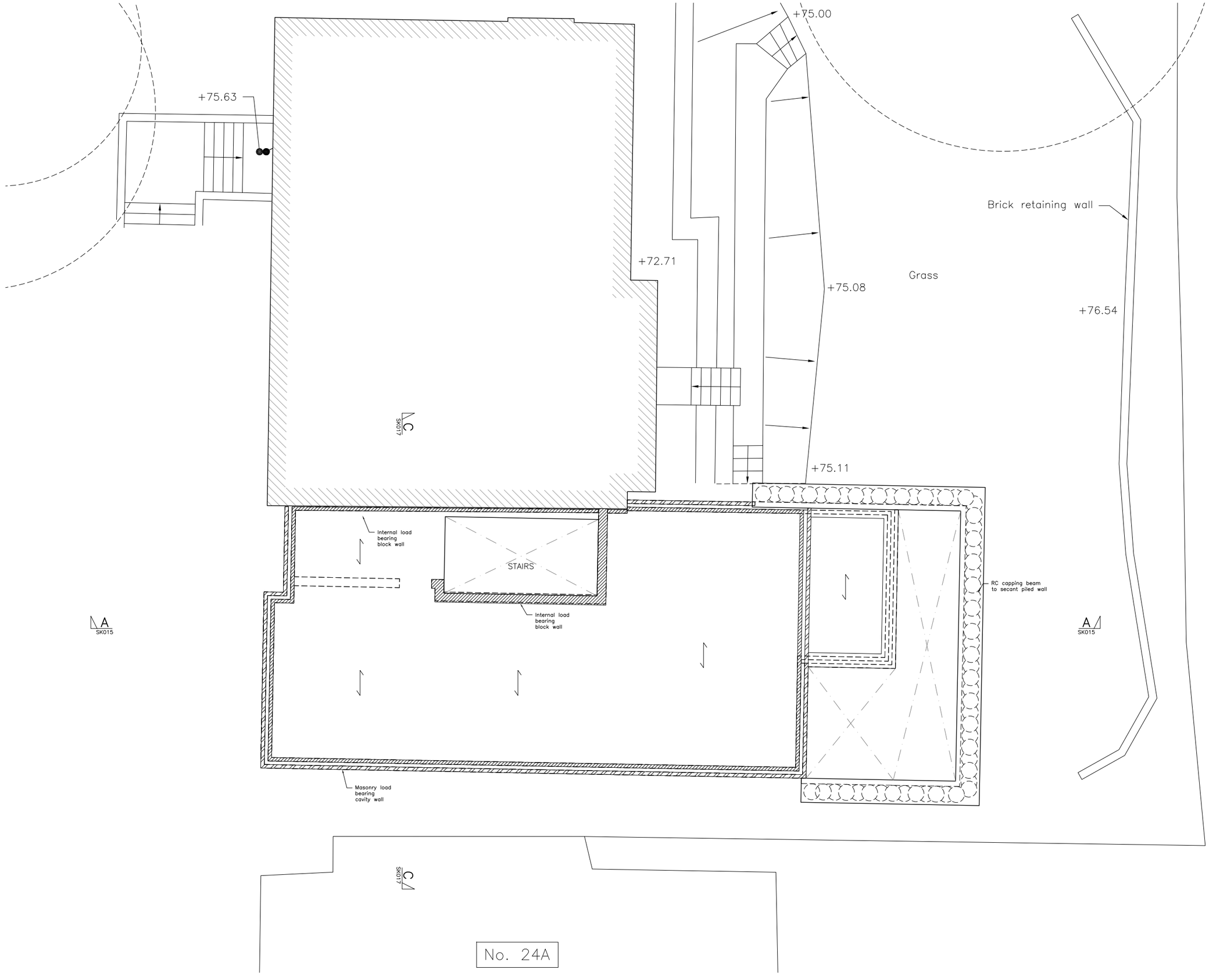
26 NETHERHALL GARDENS NW3

PROPOSED GROUND FLOOR GA PLAN

Drawn T Musson Scale 1:50 at A1

Project No./Drawing No. 8240/SK009 Rev E



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3. All dimensions are in millimetres and levels in metres.

KEY:

Precast pre-stressed concrete planks

Rev	Date	Issued	Amendment
D	18.02.19	AP	Revised Scheme – Issued for planning.
C	01.10.18	OR	Revised Scheme – Issued for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

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26 NETHERHALL GARDENS NW3

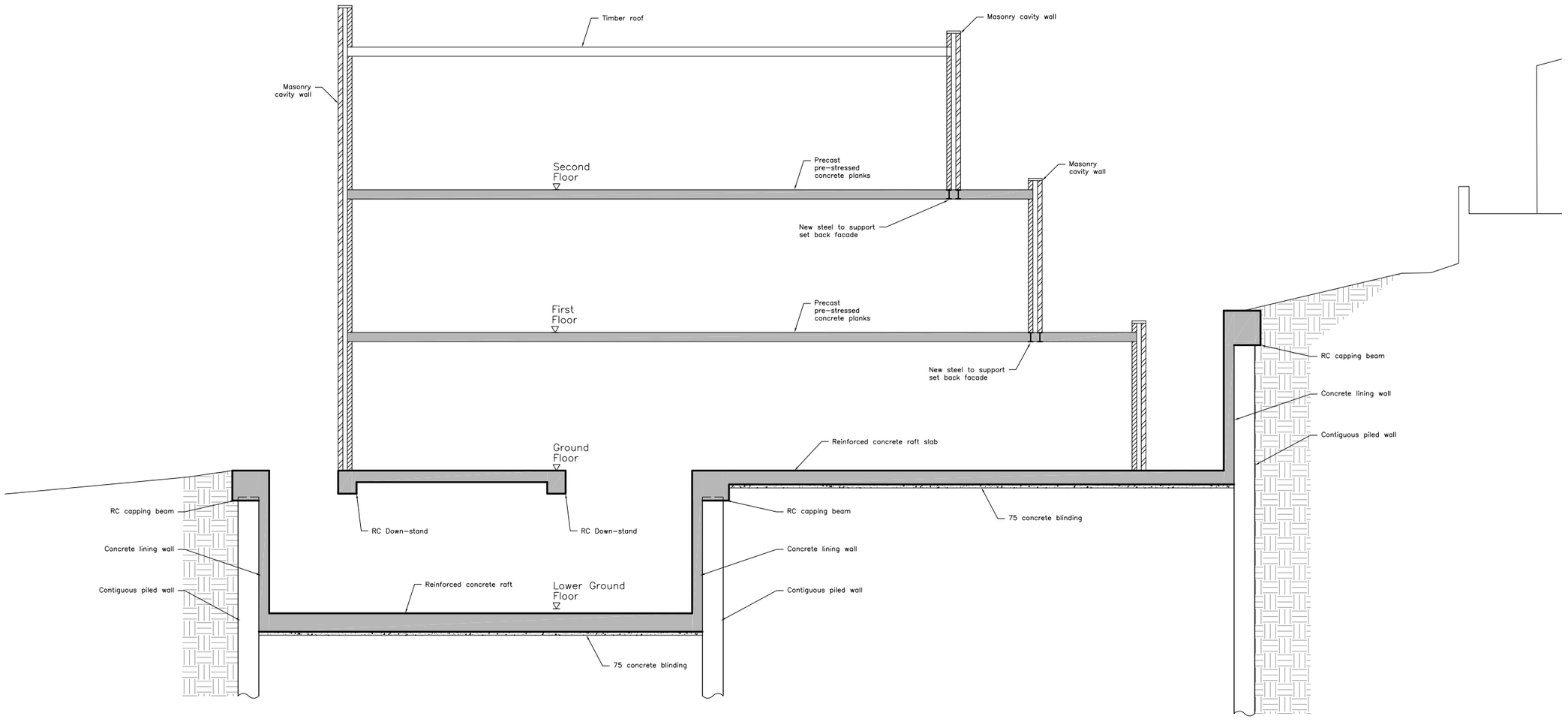
PROPOSED FIRST FLOOR

Drawn T Musson

Scale 1:50 at A1

Project No./Drawing No. 8240/SK010

Rev C



NOTES:

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Rev	Date	Issued	Amendment
D	18.02.19	AP	Revised Scheme – Updated for planning.
C	01.10.18	OR	Revised Scheme – Updated for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

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26 NETHERHALL GARDENS NW3

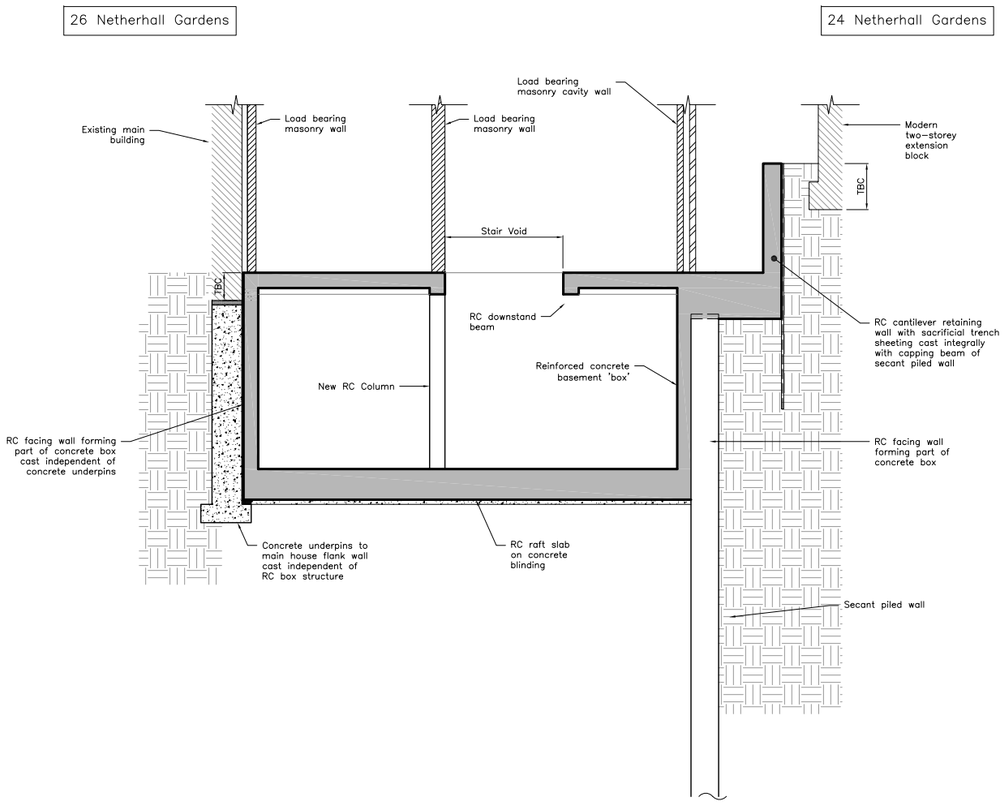
PROPOSED SECTION A–A

Drawn T Musson

Scale 1:50 at A1

Project No./Drawing No. 8240/SK015

Rev D



NOTES:

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Rev	Date	Issued	Amendment
D	08.03.19	OR	Retaining wall location updated
C	18.02.19	AP	Revised Scheme – Updated for planning.
B	01.10.18	OR	Revised Scheme – Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status

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26 NETHERHALL GARDENS NW3

PROPOSED SECTION C–C

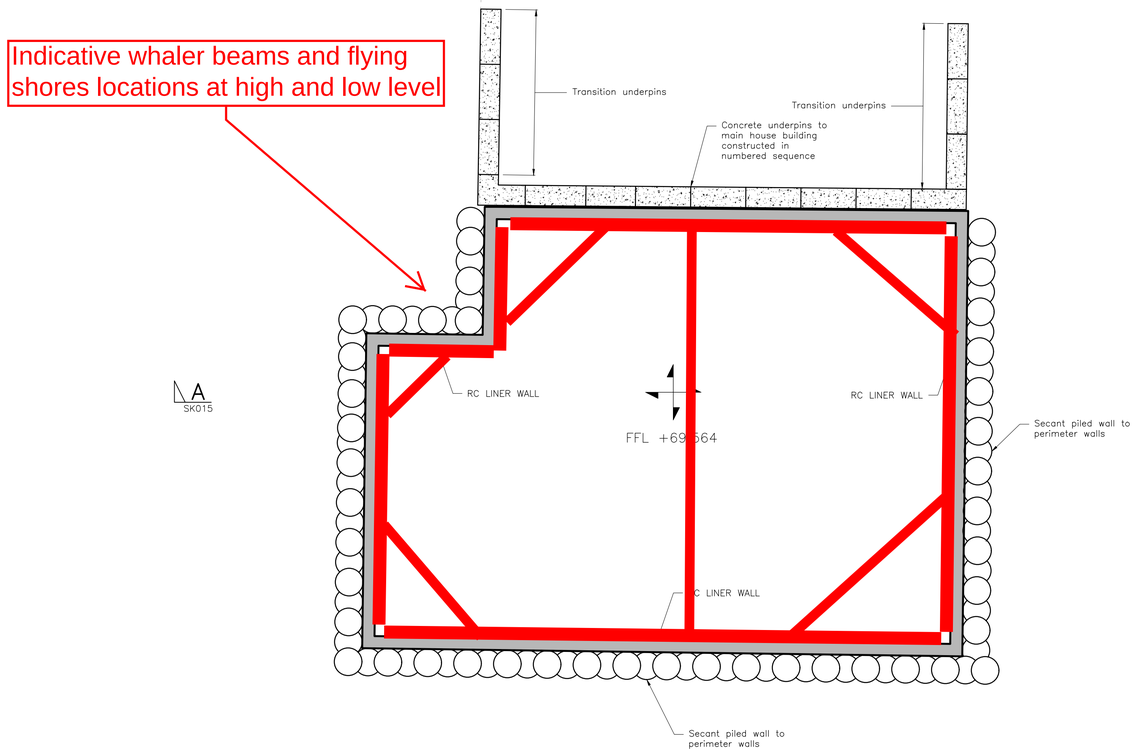
Drawn T Musson

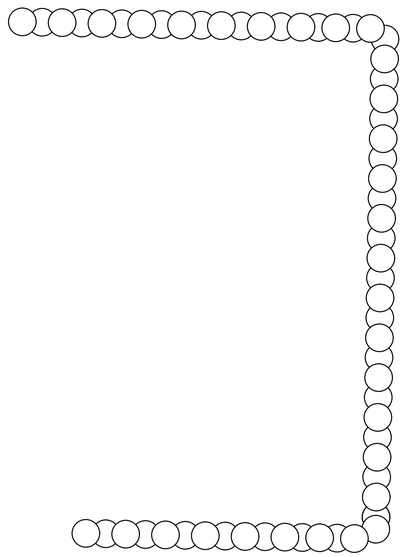
Scale 1:50 at A1

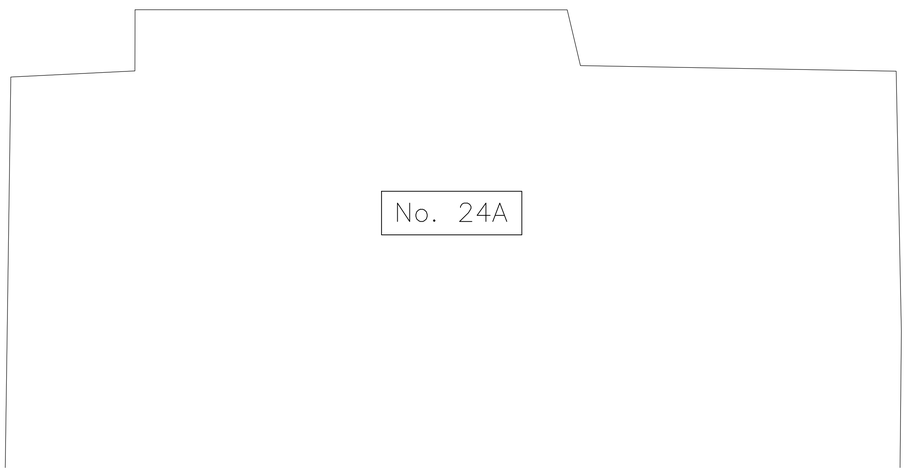
Project No./Drawing No. 8240/SK017

Rev D

APPENDIX C - INDICATIVE TEMPORARY WORKS PROPOSALS







Sinclair Johnston & Partners
Indicative Basement Level Temporary Works
8240 SJP AP 190218

NOTES:

1. This drawing is for planning purposes only and is to be read with Sinclair Johnston & Partners 'Construction Method Statement' document and all relevant Architect's planning documentation submit with the planning application.
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3. All dimensions are in millimetres and levels in metres.

KEY:

RC Ground Bearing Raft Slab.

Rev	Date	Issued	Amendment
D	18.01.19	AP	Revised Scheme – Issued for planning.
C	01.10.18	OR	Revised Scheme – Issued for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status
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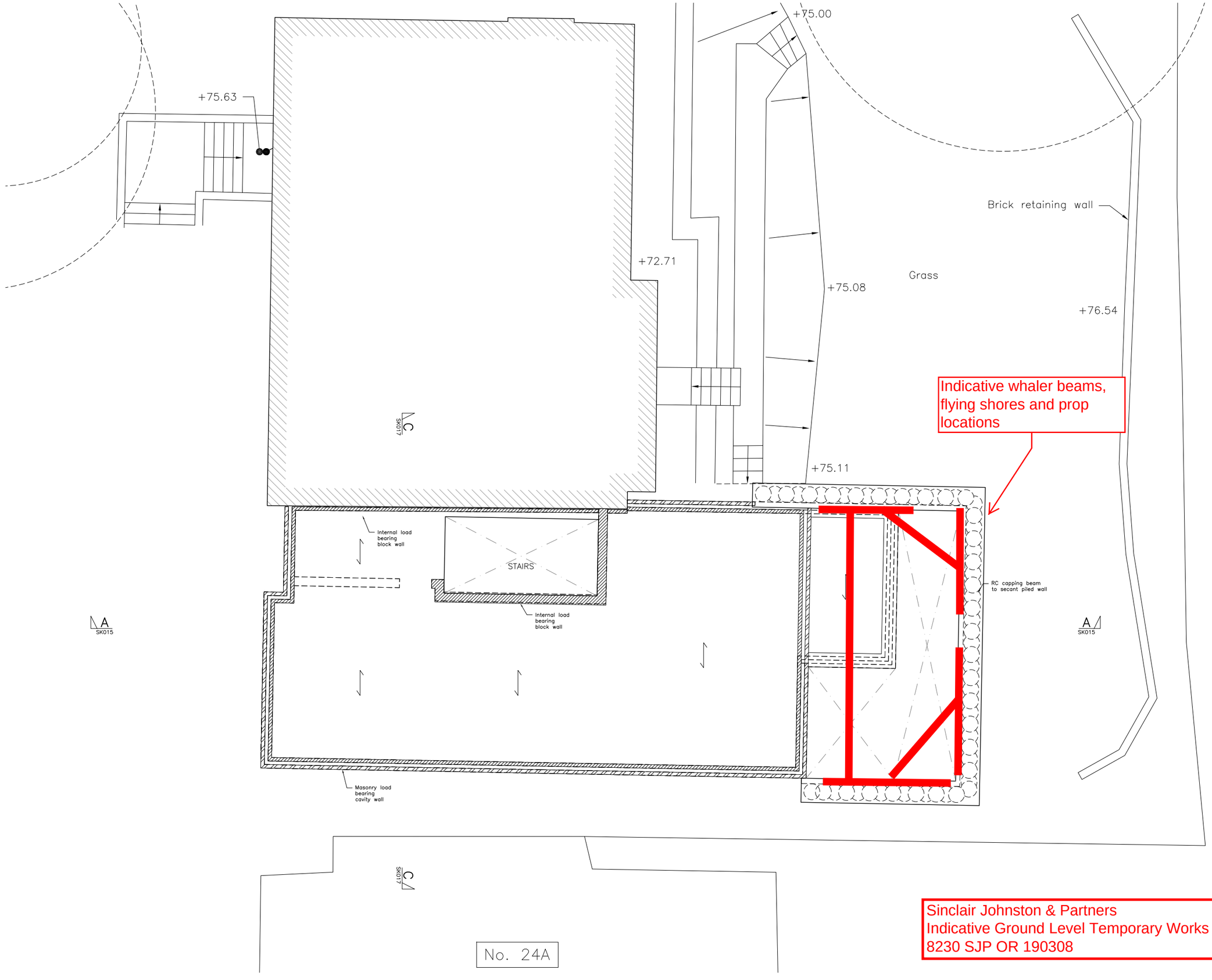
26 NETHERHALL GARDENS NW3

LOWER GROUND GA PLAN

Drawn T Musson
Scale 1:50 at A1

Project No./Drawing No. 8240/SK008
Rev C



NOTES:

1. This drawing is for planning purposes only and is to be read with Sinclair Johnston & Partners 'Structural Design & Construction Statement' document and all relevant Architect's planning documentation submit with the planning application.
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3. All dimensions are in millimetres and levels in metres.

KEY:

Precast pre-stressed concrete planks

Sinclair Johnston & Partners
Indicative Ground Level Temporary Works
8230 SJP OR 190308

Rev	Date	Issued	Amendment
D	18.02.19	AP	Revised Scheme – Issued for planning.
C	01.10.18	OR	Revised Scheme – Issued for planning.
B	11.01.17	SH	Updated for planning.
A	27.08.14	TJM	Updated for planning.
–	23.07.14	TJM	Issued for planning.

Status *PLANNING*

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PROPOSED FIRST FLOOR

Drawn T Musson Scale 1:50 at A1

Project No./Drawing No. 8240/SK010 Rev C